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Title : **IDEAS – ENVISAT AATSR Consolidated Level 0 Dataset Completeness Analysis**

Abstract : This document reports on the completeness of the AATSR consolidated Level 0 dataset. The analysis was performed by IDEAS and includes recommendations for building a clean and complete consolidated Level 0 dataset for reprocessing campaigns

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AMENDMENT POLICY

This document shall be amended by releasing a new edition of the document in its entirety. The Amendment Record Sheet below records the history and issue status of this document.

AMENDMENT RECORD SHEET

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1. INTRODUCTION

1.1 Purpose and Scope

This Technical Note reports on the completeness analysis performed by IDEAS on the Envisat AATSR consolidated Level 0 (**L0**) dataset, providing recommendations for building a clean and complete consolidated L0 dataset for reprocessing campaigns.

This report lists the gaps that were found in the existing L0 database, along with explanations for those gaps, where found. It also provides a list of L0 products that can be set aside to provide a cleaned L0 database, and other recommendations for improving the L0 database.

The list of filenames of the existing consolidated L0 dataset was provided by ESA.

1.2 Structure of the Document

After this introduction, the document is divided into a number of major sections that are briefly described below:

2 METHODOLOGY

This section outlines the method used to obtain the listing of gaps within the AATSR L0 dataset. It also explains the categorisation used in the L0 gap listings.

3 SUMMARY OF LEVEL 0 GAP ANALYSIS

A summary of the findings is presented in this section, showing the duration of the data gaps that cannot be explained, the overall availability of AATSR L0 data and gap details when separated into years and event categories.

4 SUMMARY OF DATA TO BE EXCLUDED FROM THE AATSR DATASET

Certain L0 products were excluded from the L0 gap analysis; this section explains the reasoning behind this and summarises the exclusion categories.

5 CONCLUSION

Concluding remarks on the L0 gap analysis are given in this section, along with recommendations for streamlining the current AATSR L0 dataset and suggestions for further improvements.

6 GLOSSARY

This section presents the abbreviations commonly used in this document.

APPENDIX A AATSR PRODUCT ORBIT NUMBERING

An explanation of AATSR product orbit numbering relative to Envisat orbit numbers is provided here.

APPENDIX B GAPS IN THE AATSR L0 DATABASE

This section contains the full gap listings for the AATSR L0 dataset, on a year-by-year basis.

APPENDIX C LISTS OF L0 DATA TO BE REMOVED FROM THE LRAC DATABASE

This section lists the L0 data that it is recommended be set aside from the LRAC database.

1.3   Referenced Documents

The following is a list of documents with a direct bearing on the content of this report. Where referenced in the text, these are identified as RD.n, where 'n' is the number in the list below:

RD.1   Smith. D. L. (2012) ENVISAT AATSR Instrument Performance – End of Mission Report, PO-RP-RAL-AT-0621, Issue 1.0.

1.4   Definitions of Terms

The following terms have been used in this report with the meanings shown.

Term	Definition
IDEAS	Instrument Data quality Evaluation and Analysis Service, reporting to the ESA Data Quality and Algorithms Management Office (EOP-GMQ), responsible for quality of data provided to users including the data calibration and validation, the data processing algorithms, and the routine instrument and processing chain performances.

2.   METHODOLOGY

2.1   Background

In preparation for the third full reprocessing of AATSR data, a listing of the L0 dataset held at the Low-Rate Archiving Centre (**LRAC**) was analysed in order to ensure the best possible quality L0 dataset was used as the input for the reprocessing. This analysis identified L0 products that were to be set aside from the reprocessing, resulting in a final Master list of L0 products to be reprocessed. This Master list was used as the baseline for the analysis of gaps in the consolidated L0 database.

The L0 products themselves were not inspected, so this assessment is based solely on the information present in the filename. Therefore, there was no knowledge of consolidator version – unless associated with processor flag – and no indication of the processing time for the L0 being analysed. This analysis considers only gaps between consecutive data products and cannot attempt to detect any gaps within the L0 products nor assess the quality of the L0 products.

The information provided shows that LRAC holds AATSR L0 data from orbits 01149 to 52866 (20 May 2002 to 08 April 2012), and we have analysed and listed all the available data for gaps in the L0 dataset. However, in-depth analysis on explained vs unexplained gaps and expected availability runs from the start of Envisat nominal operations on 23 July 2002 to the end of mission.

Note that the orbit numbers in this document refer to the orbit numbers present in the AATSR product name, and cannot be assumed to refer to the Envisat orbit number. For further clarification on the topic of orbit numbering, please refer to APPENDIX A.

In general, and for clarification purposes, we assume that:

- For orbit 01149 to orbit 43576, the L0 data is comprised of the reconsolidated L0 dataset that was delivered (the bulk in October-December 2012 and some final L0 in May 2013) from LRAC to the UK Processing and Archive Centre (**UK-PAC**) for the AATSR reprocessing.

- From orbit 43577 to the end of mission, the L0 data held at LRAC is given in the L0 listing that was sent to IDEAS (to L. Saavedra De Miguel) in August 2012.

- Any previously held L0 products from the reconsolidated period (i.e. anything up to and including orbit 43576), have been set aside at LRAC.

The purpose of the above points is to ensure that the L0 database consists of consolidated products that were generated using at least consolidator version ECONS 1.01 (as this was the version known to include a correction for a previous problem with consolidated AATSR data).

2.2   Method for Identification of Excluded Products

IDEAS initially analysed the full L0 listings mentioned in Section 2.1 to identify products that could be excluded from the reprocessing, before calculating the L0 gaps from the remaining cleaned listing. The products that were excluded were either:

1) Exact duplicates
   Analysis of the L0 database listing easily allowed for the identification of duplicate products that coincided exactly in their start and end times. As the filenames of these duplicate products are identical in all respects apart from the counter, we chose to retain the product with the greater counter number.

2) Encompassed products

Our analysis also identified short products that were completely encompassed by a nominal longer product. In this instance the longer, more complete, product was retained.

3) Overlapped products

Overlapped products were categorised as those products that share the same orbit number but are not genuinely unique data. They were usually almost-duplicates differing by 1 or 2 seconds in either their start time or end time. We chose to keep the product with the greater counter number, assuming that this will be the most recently generated product. (APPENDIX A gives an indication of how products may contain the same orbit number in their name but not be unique, duplicate or encompassed.)

4) Zero-length products

These products are consolidated L0 that contain no data, i.e. they are 0 seconds in length. They were generated during the switch over from general instrument unavailability during satellite anomalies to specific AATSR unavailability. Since there is no data within these products, they do not need to remain in the L0 database.

In cases where there were more than one product for a particular orbit, and where there was no quality reason for removal of one (e.g. exact duplicates), we chose to retain the product with the greater counter number, assuming that this will be the most recently generated product in most cases. Ideally, access to the L0 products would provide exact processing date information upon which to base this choice, but that was not possible.

IDEAS provided a list of the L0 products that had the above characteristics and were to be excluded from the reprocessing, but information on them was kept, both for IDEAS records and for long-term data preservation purposes.

2.3   Method for L0 Gap Analysis

Once a "cleaned" baseline L0 listing was available as outlined in Section 2.2, we were able to identify gaps in the L0 listings accurately. Since AATSR was expected to provide continuous coverage throughout the Envisat mission, with the exception of planned platform or instrument events, any time span that did not have L0 coverage was classified as a gap. We then attempted to categorise the reason for these gaps.

2.4   L0 Gap Categorisation

There were two main ways in which the L0 gaps were categorised: those gaps for which an explanation could be found; and those gaps that were planned or unplanned. The first category, and more specifically, the list of *unexplained* gaps, could lead to an investigation into the possible recovery of L0 data. This is because, if a gaps can be explained, then it is highly likely that the L0 data is not recoverable (depending on the explanation for the gap). The second category (planned or unplanned) provides an indication of the reliability of AATSR throughout the Envisat mission.

If an explanation for a gap could be found, we attributed it to one of the following origins, otherwise it was left as 'not known' (*n/k* in the tables in this document):

1) On-board event (platform or instrument)

As explained above; the operations plan for AATSR was continuous acquisition of data. Therefore any on-board events, be they planned or unplanned, would have an impact on AATSR data. See Section 2.4.1 for details of these events.

2) Ground segment event

The nominal operations scenario for AATSR was that data was downlinked to and processed at the visible ground station (**GS**) throughout the day. See Section 2.4.2 for details.

3) Artemis event

Artemis events would normally be categorised as ground segment events, since the Artemis Data Relay Satellite was used as a relay for data transfer from Envisat to the ESRIN GS. However, due to our uncertainty in data transfer timings and Artemis unavailabilities, we have itemised them separately from other ground segment events. See Section 2.4.3 for details.

After identifying the origin of a gap and the reason for it, it was then clear whether the gap was planned or unplanned. In each case, a note was made of the source of the information that we used to categorise a gap, and these are explained in Section 2.4.4.

2.4.1 On-board events

The main on-board events that resulted in L0 gaps were:

1) **Envisat Orbital Control Manoeuvres (OCM)**: AATSR was commanded out of MEASUREMENT mode in advance of an OCM and returned to MEASUREMENT mode once it was completed. These were planned events.

2) **AATSR housekeeping events:** instrument outgassings that followed on from an anomaly. These were planned events. (Note that there were other housekeeping events, such as blackbody crossover tests and routine outgassings, but the instrument was left on so, whilst these had an impact on the quality of AATSR data, they did not result in a gap in the data.)

3) **Envisat (platform/service module) anomalies** for which all instruments were switched off or set to STANDBY. These were unplanned events.

4) **AATSR anomalies** that caused loss of data.

There were four AATSR instrument anomalies that led to a disruption of operations (i.e. no generated data) during the mission, and one of these was during the commissioning period (prior to 23 July 2002). These anomalies are listed in Table 1 and are taken from RD.1, in which a fuller explanation of each anomaly is given.

Table 1. AATSR anomalies during the Envisat mission

Date	Anomaly details
15-24 Apr 2002	AATSR entered REFUSE mode after cooler body temperature fell below the lower switchdown limit of -10C
04-08 Aug 2006	AATSR was switched into RESET/WAIT by the platform macro command
03-06 Dec 2007	AATSR was commanded into STANDBY mode during an ENVISAT memory maintenance activity. On restart the instrument went into STANDBY/REFUSE mode at 08:10 on 05-Dec-2007.
08 Oct 2009	AATSR switched into WAIT mode following consecutive ICU FORMAT High Data Rate (HDR) Errors.

For some on-board problems, for example, Envisat High Speed Multiplexer (HSM) anomalies, that caused instrument data to be corrupted rather than completely absent, there exists the possibility of some data recovery. These will have to be assessed on a case-by-case basis as part of some future activity (see recommendations in Section 5).

2.4.2 Ground segment events

Ground segment events that can cause gaps in the L0 database include hardware, software and reception problems at the ground stations. Since it is more difficult to categorise ground segment

events as a definite cause of a L0 gap, we have categorised the ground segment as a cause only when an unavailability (**U/A**) Report or a Weekly Mission Operation Report (see Section 2.4.4) was issued that explicitly stated that satellite data or telemetry was lost.

The visible GS for data reception were Kiruna GS from approx. 06:30 to 20:00 UTC, and ESRIN (via Artemis) from approx. 20:00 to 06:30 UTC; this information was useful in ascribing gaps to particular GS unavailabilities.

Note that Svalbard GS was used instead of ESRIN GS for the following dates: 01 October - 14 November 2006 and 06 March - 07 April 2008. So for these periods, reports of problems at the Svalbard GS were considered significant rather than those relating to data reception at ESRIN GS.

2.4.3 Artemis events

As mentioned earlier, the Artemis Data Relay Satellite was used as a relay for data transfer from Envisat to the ESRIN GS. However, Artemis was also needed to support the Automated Transfer Vehicle (**ATV**) making space station deliveries; these instances took priority over the transfer of Envisat data. When Artemis was scheduled to deal with the ATV over a large period of time, the GS scenario was switched from Kiruna/ESRIN to Kiruna/Svalbard (e.g. March-April 2008). Occasionally, emergency requests were made for the use of Artemis that resulted in Envisat/Artemis U/A reports. Artemis was also susceptible to anomalies that affected the transfer of Envisat data and U/A reports were produced accordingly.

It was found that, in many cases, the end time of some AATSR gaps fell within reported Artemis unavailability times, so we were fairly confident that the download of the data was affected by the Artemis U/A. We therefore categorised Artemis as the origin for many of the gaps, but with the caveat that we cannot be completely certain due to our lack of knowledge with regard to the timings of the transfer of Envisat data via Artemis.

2.4.4 Sources of information

The references used as sources for the unavailabilities were:

- The RAL AATSR Status History website at: http://www.aatsrops.rl.ac.uk/status.html contains a listing of events and commands issued to the AATSR instrument during the mission.

- The Envisat Unavailability Report Listing contains timings and details of Envisat and Artemis/Envisat unavailabilities. The individual U/A Reports were routinely disseminated by the Envisat Flight Control Team and the Artemis Mission Control Facility; these outlined the affected subsystems and the times for which each instrument was unavailable. The U/A Reports were produced for both planned and unplanned events, and usually itemised by instrument, even in cases where the original cause was the platform; the U/A List itself was compiled and sent by ESOC as a reference.

- Weekly Mission Operation Reports generated by the Envisat Flight Control Team. These reports covered general spacecraft status, operations activities, a ground segment overview and future planned operations and activities. Using these reports we were able to categorise some gaps as being due to ground segment problems. Ground segment problems could be telemetry issues and ground station hardware problems (e.g. due to antenna problems or disruptive weather) or ground segment software problems.

- Operational AATSR QC daily reports at: http://earth.eo.esa.int/pcs/envisat/aatsr/reports/daily/, starting from September 2005. Events listed within these reports could be from official ESA user news, or more informal information from other sources.

Table 2 gives a summary of the above references used in the categorisation of L0 gaps.

Table 2. References used in the categorisation of L0 gaps

L0 gap table reference	Details	Used for categorisation of
RAL Status	RAL AATSR Status History website at: http://www.aatsrops.rl.ac.uk/status.html	OCMs AATSR/Envisat anomalies
U/A list	Envisat Unavailability Report listings	OCMs AATSR/Envisat anomalies Artemis and ground segment unavailabilities
WR*nnn*	Weekly Mission Operation Reports	Ground segment issues
Daily report	Operational AATSR QC at: http://earth.eo.esa.int/pcs/envisat/aatsr/reports/daily/	NRT issues and items from ESA user news

For further reference, the website http://earth.eo.esa.int/envisat-availability/ contains a listing of officially announced AATSR unavailability periods, however these do not always correlate to gaps in the L0 listings. This is due to the fact that some housekeeping unavailabilities still generated data for monitoring purposes and that some unplanned unavailabilities do not appear on this list. Therefore, we did not use this as a source for our investigations.

2.5   Outcomes

The main result for the purpose of L0 completeness is a list of gaps in the AATSR L0 database (see Section 3 and APPENDIX B), along with an explanation, where possible. This result leads on to the listing of those gaps which have no explanation and therefore may be recovered.

This analysis also produced lists of superfluous L0 products that should be removed or set aside from the L0 dataset (see Section 4 and APPENDIX C) in order to provide a cleaned L0 dataset.

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3.   SUMMARY OF LEVEL 0 GAP ANALYSIS

Table 7 to Table 17 in APPENDIX B list the gaps that were identified in the cleaned consolidated L0 database listing for 2002 – 2012, respectively, along with an explanation for the gap if one could be found. Note that information from the early years of Envisat is more difficult to obtain, and so there are many more unexplained gaps from that time.

Table 3 provides a summary of the information in the L0 gap tables. For each year Table 3 provides the duration (in seconds) of those gaps that are both explained and unexplained, and planned and unplanned. The explained gaps have been further subdivided into event categories (On-board, Ground segment or Artemis).

Note that 2002 data in Table 3 were analysed from the start of Envisat operations on 23 July 2002, and not from the start of the available AATSR L0 dataset (20 May 2002).

Table 3. Summary of data in the L0 gap tables (gap duration in seconds)

			2002		2003		2004	
			Planned	**Unplanned**	**Planned**	**Unplanned**	**Planned**	**Unplanned**
Explained		On-board	628746	0	208265	1067889	112084	196419
		Ground segment	0	0	0	21737	0	0
		Artemis	0	0	0	0	0	36819
Unexplained			-	961178	-	619050	-	876485
			2005		2006		2007	
			Planned	**Unplanned**	**Planned**	**Unplanned**	**Planned**	**Unplanned**
Explained		On-board	112806	0	350588	1265097	317439	445461
		Ground segment	0	47741	0	22692	0	26464
		Artemis	0	68125	0	206046	0	36932
Unexplained			-	593080	-	166357	-	220324
			2008		2009		2010	
			Planned	**Unplanned**	**Planned**	**Unplanned**	**Planned**	**Unplanned**
Explained		On-board	164525	77620	146702	132104	637120	0
		Ground segment	0	62165	0	62490	0	56933
		Artemis	0	61621	0	86584	0	78241
Unexplained			-	29764	-	17110	-	170748
			2011		2012		**Total**	
			Planned	**Unplanned**	**Planned**	**Unplanned**	**Planned**	**Unplanned**
Explained		On-board	196595	165080	310267	0	3185137	3349670
		Ground segment	0	109314	0	28475	0	438011
		Artemis	0	122634	0	0	0	697002
Unexplained			-	178642	-	0	-	3832738

Figure 1 displays the L0 gap duration in days subdivided into explained/unexplained gaps per year. The total duration of explained gaps is 88.8 days, and that of the unexplained gaps is 44.4 days. *The 44.4 days of unexplained gaps represent the maximum amount of L0 data that could be recovered, although it is not expected that all this data would be recoverable.*
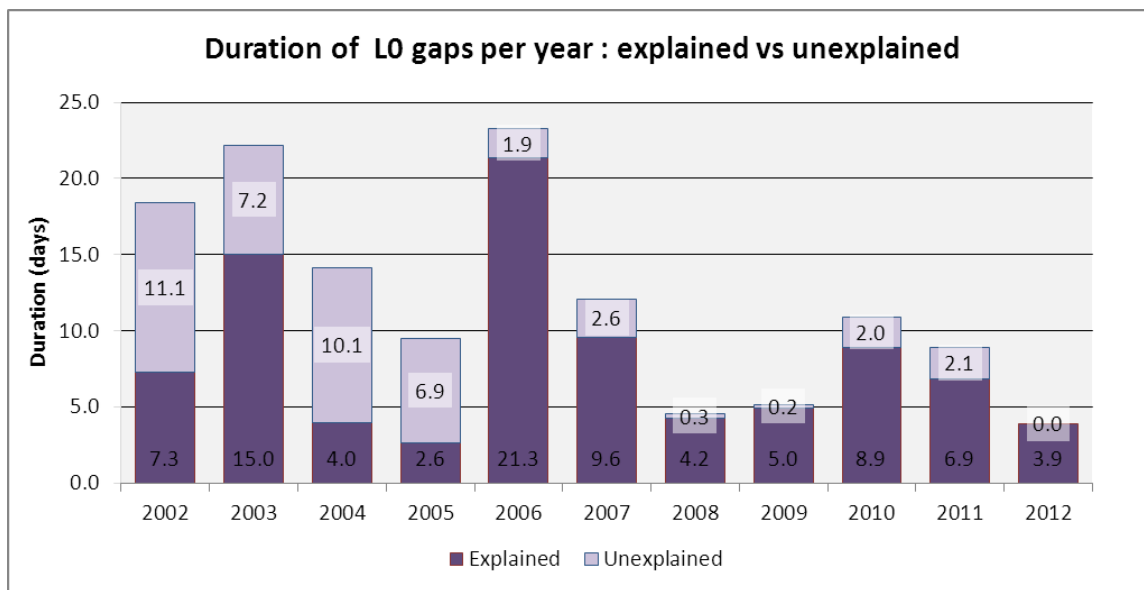
Figure 1. Duration of L0 gaps per year (in days): explained vs unexplained.

Figure 2 displays the L0 gap duration in days subdivided into planned/unplanned gaps per year. The total duration of planned gaps is 36.9 days, and that of unplanned gaps is 96.3 days.
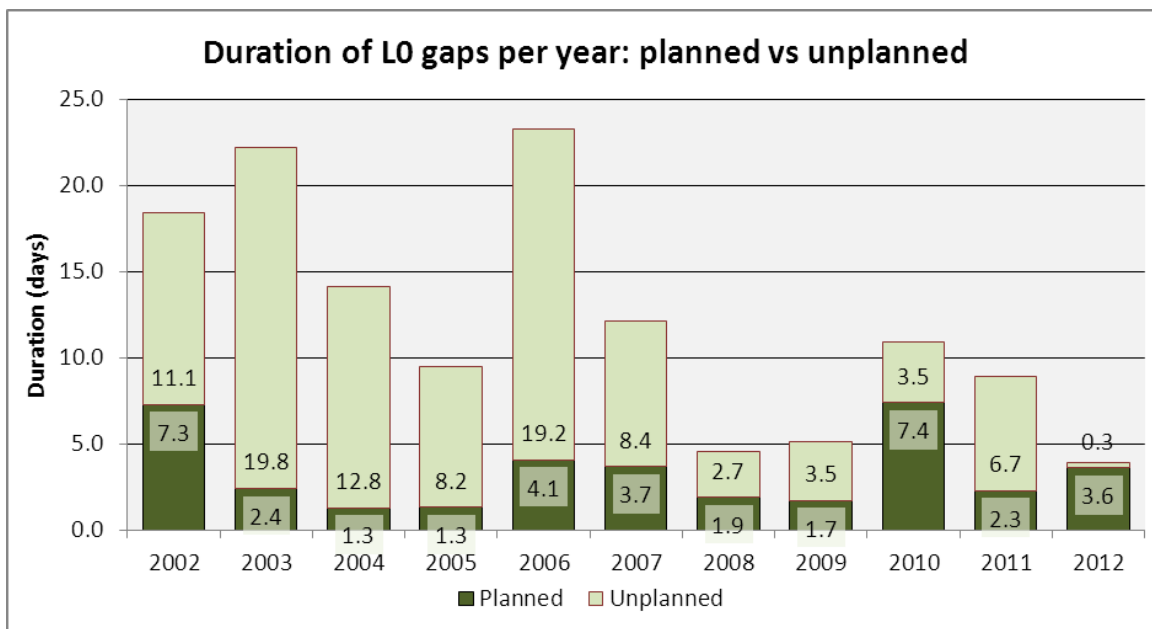
Figure 2. Duration of L0 gaps per year (in days): planned vs unplanned.

Figure 3 displays all the data summarised in Table 3, with the gap duration in days. Data are displayed for planned vs unplanned and further categorised into all event categories (explained and unexplained).
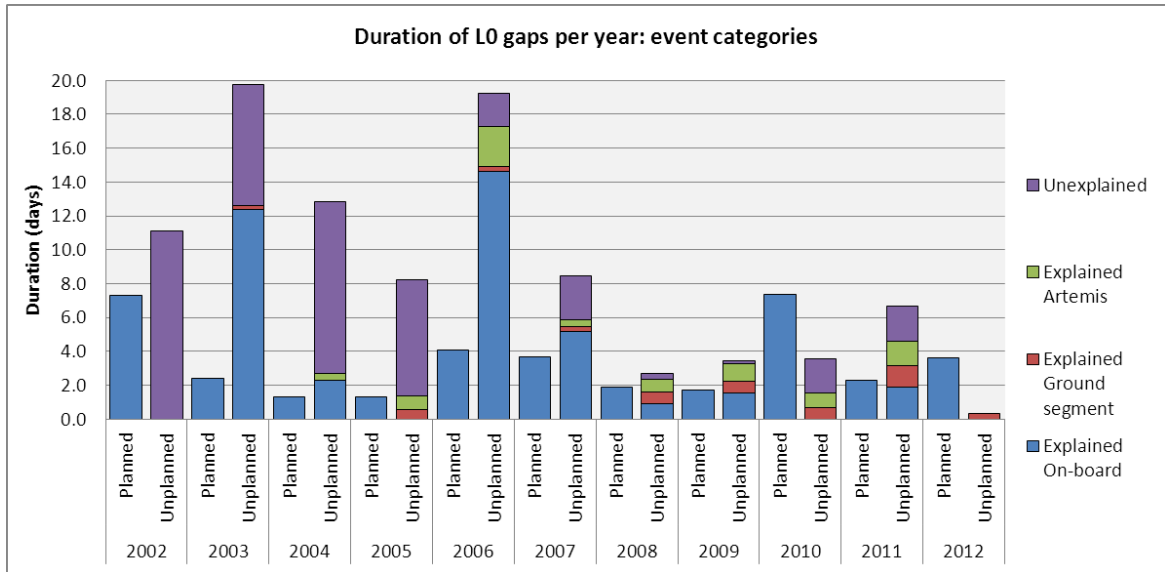
Figure 3. Duration of L0 gaps per year (in days), divided into planned vs unplanned and all event categories.

The amount of data *expected* to have been acquired in each year was calculated by subtracting the duration of planned events from the maximum amount possible for that period. Figure 4 displays the percentage of expected L0 data that was available each year from 2002 to 2012, as well as the average availability of expected data for the whole mission. Figure 4 shows almost steadily improving percentages of expected availability throughout the mission. Eight of the eleven years of Envisat AATSR operation showed expected availability of more than 95%, with 2012 being the year with the highest expected availability at 99.7%.
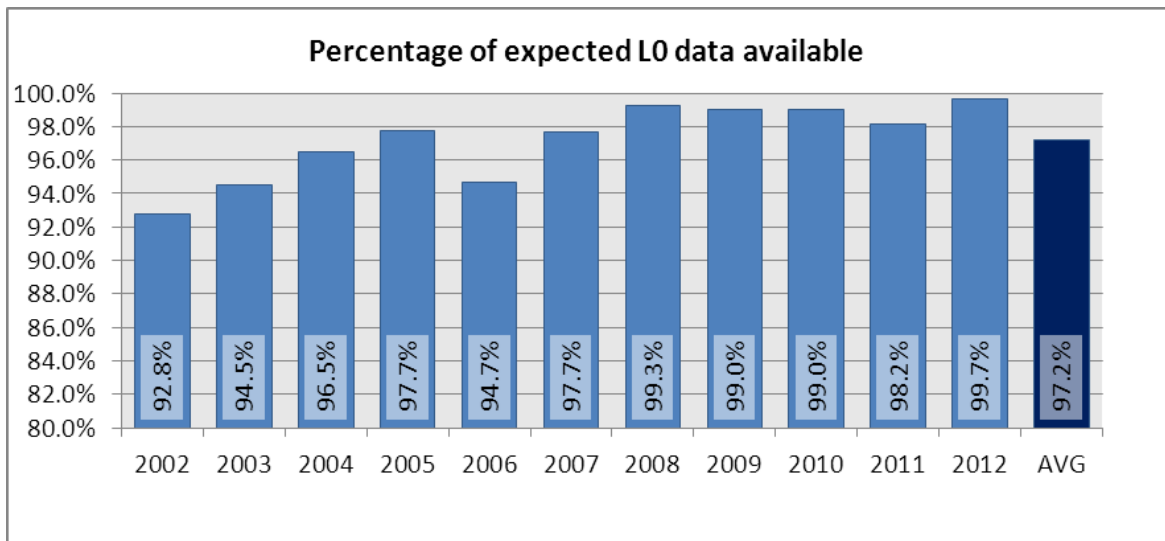
Figure 4. Percentage of expected AATSR L0 data that is available in the LRAC database for 2002 to 2012.

The final analysis shows that, over the whole operational mission, the AATSR L0 database contains over 97% of the expected L0 availability. This is a respectable total, but, as mentioned

earlier, there exists the possibility of some data recovery for the unexplained data gaps (see next section).

3.1 Unexplained L0 Gaps

It can be seen in Figure 1 and the tables in APPENDIX B that there are many gaps that cannot be explained, especially in the early years of the Envisat mission; in these instances it is not clear that the gap is permanent, and as such, there exists the possibility of data retrieval in at least some of these cases. This expectation of recovery is particularly strong for cases where there is no explanation for the gap and where some data were available in Near-Real Time (NRT).

As part of our gap analysis we also looked at information from routine quality control (information is available to IDEAS from September 2005 onwards). It was notable that, in a significant number of cases, NRT data for the consolidated L0 gap times had been transmitted via the DDS (Data Dissemination System) and received via a satellite receiver locally and/or was available via the Rolling Archives. In some cases, a full set of L0 and higher-level data had been received, in others only the higher-level data. In both circumstances, it is apparent that the NRT L0 data had been received and processed by the ground segment.

A special case consists of the L0 gaps that were seen during the Envisat 2010+ orbit lowering period. Data availability for the period 21 October to 02 November 2010 was not guaranteed during this period and there were a total of 14 separate consolidated L0 gaps during this time. However, NRT data at all levels were actually received for 4 of these gaps.

This lends weight to the hypothesis that it might be possible to fill at least some of the gaps in the consolidated L0 dataset if the appropriate data can be retrieved/re-extracted and consolidated. The recommendation is that this analysis be conducted before a future reprocessing campaign, comparing gaps in the consolidated L0 archive against a listing of available data acquired in NRT.

4. SUMMARY OF DATA TO BE EXCLUDED FROM THE AATSR DATASET

This section summarises the numbers of products that we recommend be removed or quarantined from the LRAC L0 database. Full lists of the relevant products are given in APPENDIX C.

4.1 Duplicate Products

Table 4 summarises the number of duplicate products found per year; there were 567 duplicate products in total.

Table 4. Number of duplicate products found per year

Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Total
No.	49	26	143	62	108	28	31	50	26	34	10	**567**

Table 19 in Appendix C.1 lists the duplicate products that IDEAS have identified in the LRAC L0 database. It is recommended that these be removed from the L0 database.

4.2 Encompassed Products

Table 5 summarises the number of encompassed products found per year; there were 166 encompassed products in total.

Table 5. Number of encompassed products found per year

Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Total
No.	3	1	27	2	2	1	0	1	0	125*	4	**166**

*The large number of encompassed products in 2011 was due to the attempted correction of the product length in order to try to achieve a consolidated product that was bounded by the Ascending Node Crossing (**ANX**). The attempted correction generated 117 products that were too short, the L0 consolidation environment was rolled back to the previous configuration and the products for that period (21–29 July 2011) were regenerated.

Table 20 in Appendix C.2 lists the encompassed products that IDEAS have identified in the LRAC L0 database. It is recommended that these be removed from the L0 database.

4.3 Overlapped Products

There were a total of 13 overlapped products found in the AATSR L0 dataset; all occurred in 2004. Table 21 in Appendix C.3 lists the overlapped products that IDEAS identified in the LRAC L0 database. It is recommended that these be removed from the L0 database.

4.4 Zero-length Products

Table 6 summarises the number of zero-length products found per year; there were 4 zero-length products in total.

Table 6. Number of zero-length products found per year

Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	**Total**
No.	0	0	0	0	1	0	0	1	0	1	1	**4**

Table 22 in Appendix C.4 lists the zero-length products that IDEAS have identified in the LRAC L0 database. It is recommended that these be removed from the L0 database.

5. CONCLUSION

The AATSR L0 dataset, consisting of products generated using at least ECONS 1.01 and covering data from 20 May 2002 to 08 April 2012 (orbits 01149 to 46208), has been analysed. Removal of duplicate, encompassed, overlapped and zero-length products from the list resulted in a cleaned L0 listing that easily enabled the identification of gaps in the L0 database. Attempts were made to identify the causes of these gaps using a variety of reference sources. The detailed results of this analysis are provided in APPENDIX B and a summary was given in Section 3.

Gap analysis shows that the total number of gaps in the AATSR L0 dataset is equivalent to slightly more than 133 days of missing L0 data (Table 3 and Figure 1 to Figure 3). It also showed that the L0 dataset is considerably more complete later in the Envisat mission, as might be expected.

Although the analysis concentrated on identifying and categorising the gaps in the L0 dataset, when set against the entire timeframe of the Envisat mission, the total duration of the gaps that were identified was quite small over the 10 years of operations. By removing the requirement for AATSR L0 data to be available during planned operational events, the availability of expected L0 data within the dataset is currently 97.2%. (Figure 4) This is a respectable figure, however we note that there is potential for further improvement.

The fact that there are over 44 days in total of *unexplained* gaps opens up the possibility of some data recovery. In particular, a comparison of gaps against the records of NRT unconsolidated data status shows that nominal NRT data were available for some of them; hence there exists the possibility to recover L0 data for such cases. In order to obtain maximum AATSR data availability, then this analysis should be repeated for all L0 gaps comparing to unconsolidated data (or even raw telemetry) held at the ground stations.

Based on the findings of our analysis, the IDEAS AATSR QC Team makes the following recommendations:

- Unexplained L0 gaps should be explored further with regard to data re-extraction and consolidation. This would be particularly recommended before any future reprocessing of AATSR L0 data.

- The current L0 database should be cleaned, via the exclusion of the products listed in APPENDIX C.

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6.   GLOSSARY

The following acronyms and abbreviations have been used in this report.

ANX	Ascending Node Crossing
ATV	Automated Transfer Vehicle
GS	Ground Station
HDR	High Data Rate
HSM	High Speed Multiplexer
L0	Level 0
LRAC	Low-Rate Archiving Centre
OCM	Orbital Control Manoeuvre
RD	Reference Document
U/A	UnAvailability
UK-PAC	UK Processing and Archive Centre

APPENDIX A   AATSR PRODUCT ORBIT NUMBERING

Where orbit numbers are referred to in this document, they are the orbit numbers present in the AATSR product name. This orbit number cannot be assumed to be the same as the Envisat orbit number. The Envisat product specifications state that a product is assigned the orbit number based on the orbit within which the first line of data is contained. Since nominal AATSR consolidated products start before the ANX of a particular orbit, they are generally named with the orbit number previous to the one for the whole orbit that they represent. Short AATSR products may have the same formulation as a nominal product and start in the preceding orbit, or they may start after the ANX and therefore be assigned the "correct" orbit number.

Figure 5 illustrates this issue, referring to both nominal length products and short length products.
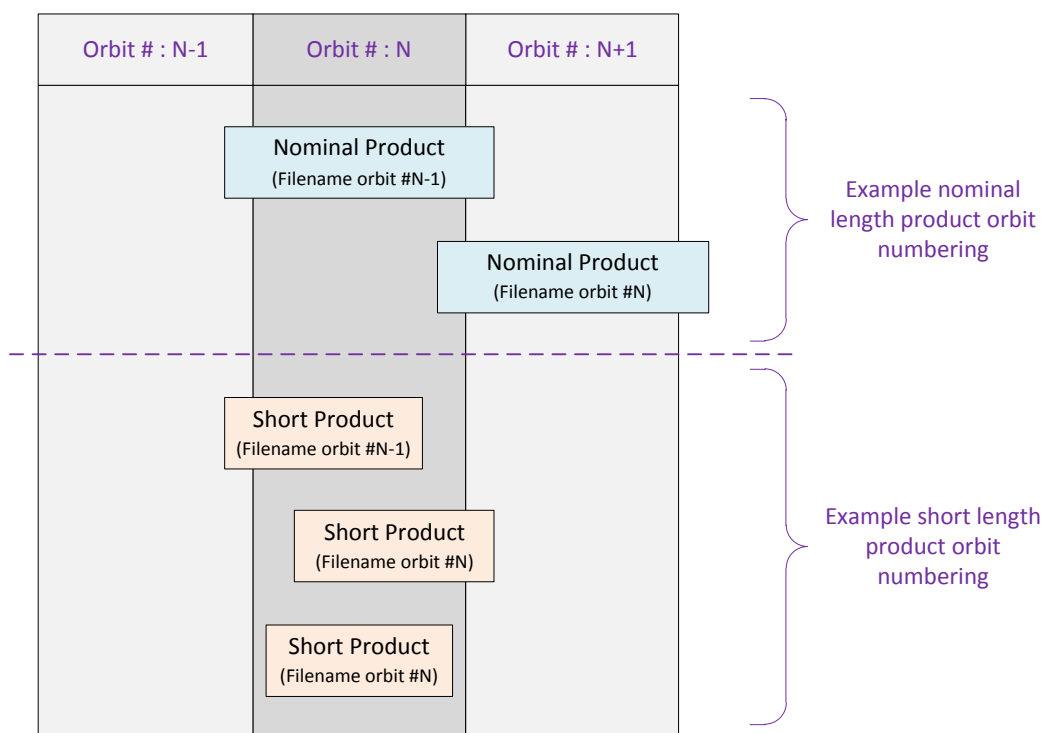
Figure 5. Illustration of AATSR product orbit numbering.

For these reasons, when data for a particular Envisat orbit is sought, it is recommended that reference always be made to the start time information in the AATSR product name rather than relying on the orbit number in the AATSR product name.

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APPENDIX B   GAPS IN THE AATSR L0 DATABASE

Table 7 to Table 17 list the gaps found in the cleaned L0 listing for 2002 – 2012, respectively. They list the start and end times of each gap and its duration (in seconds). If the L0 gap was due to a planned event, then this is indicated in the Planned column with Y, otherwise the event was considered to be unplanned (N in the Planned column). The origin of the gap is given if certain, and the reason given if any relevant information was found. The reference used for the information outlined in the tables is listed, along with any further details, if available. Where no information could be found about the reason for a gap, this has been indicated by *n/k* (not known).

Note that the origin of a gap can be either On-board, Ground segment or Artemis. See Section 2.4 for a full explanation of the gap categorisation and the references used to source the information.

Although L0 gaps have been listed for the Commissioning Period in 2002 in Table 7, they have not been categorised or included in the summary given in Section 3, since there was no operational requirement for data during that time.

Table 18 in Appendix B.1 lists the acronyms and abbreviations that are used in the L0 gap tables.

Table 7. Level 0 gaps for 2002

Gap start	Gap end	Duration (s)	Planned	Origin	Reason	Reference	Details
20/05/2002 23:09:28	20/05/2002 23:22:52	804					*Commissioning period*
21/05/2002 04:52:48	21/05/2002 06:24:03	5475					*Commissioning period*
23/05/2002 18:40:20	23/05/2002 22:03:10	12170					*Commissioning period*
24/05/2002 11:37:14	24/05/2002 14:54:14	11820					*Commissioning period*
25/05/2002 05:16:24	25/05/2002 11:06:40	21016					*Commissioning period*
25/05/2002 11:07:01	25/05/2002 12:45:11	5890					*Commissioning period*
26/05/2002 16:51:37	26/05/2002 18:27:13	5736					*Commissioning period*
26/05/2002 22:05:33	29/05/2002 18:55:00	247767					*Commissioning period*
31/05/2002 20:55:53	01/06/2002 00:12:06	11773					*Commissioning period*
02/06/2002 20:02:32	02/06/2002 23:31:25	12533					*Commissioning period*
03/06/2002 01:23:32	03/06/2002 05:26:27	14575					*Commissioning period*

Gap start	Gap end	Duration (s)	Planned	Origin	Reason	Reference	Details
03/06/2002 07:05:07	03/06/2002 08:03:03	3476					*Commissioning period*
05/06/2002 02:37:05	05/06/2002 06:10:19	12794					*Commissioning period*
05/06/2002 20:08:53	11/06/2002 12:48:59	492006					*Commissioning period*
13/06/2002 22:41:35	14/06/2002 02:12:30	12655					*Commissioning period*
14/06/2002 02:36:57	14/06/2002 06:28:02	13865					*Commissioning period*
14/06/2002 07:20:38	14/06/2002 12:13:14	17556					*Commissioning period*
14/06/2002 13:53:02	14/06/2002 15:30:36	5854					*Commissioning period*
15/06/2002 23:03:42	16/06/2002 01:48:08	9866					*Commissioning period*
17/06/2002 06:34:29	17/06/2002 07:28:52	3263					*Commissioning period*
17/06/2002 10:42:26	17/06/2002 12:20:22	5876					*Commissioning period*
17/06/2002 13:59:47	17/06/2002 15:37:44	5877					*Commissioning period*
19/06/2002 21:13:04	19/06/2002 22:52:45	5981					*Commissioning period*
20/06/2002 01:17:44	20/06/2002 02:10:19	3155					*Commissioning period*
20/06/2002 03:07:37	20/06/2002 03:58:18	3041					*Commissioning period*
20/06/2002 05:48:18	20/06/2002 09:06:43	11905					*Commissioning period*
20/06/2002 18:59:38	20/06/2002 22:20:25	12047					*Commissioning period*
25/06/2002 21:21:56	26/06/2002 01:45:03	15787					*Commissioning period*
26/06/2002 06:03:42	26/06/2002 07:39:44	5762					*Commissioning period*
29/06/2002 00:53:18	29/06/2002 02:43:53	6635					*Commissioning period*
29/06/2002 05:30:03	29/06/2002 07:48:31	8308					*Commissioning period*
29/06/2002 16:01:58	30/06/2002 07:15:10	54792					*Commissioning period*
30/06/2002 08:59:06	30/06/2002 12:14:58	11752					*Commissioning period*
04/07/2002 11:49:24	04/07/2002 19:57:03	29259					*Commissioning period*
05/07/2002 00:31:50	05/07/2002 01:51:25	4775					*Commissioning period*

Gap start	Gap end	Duration (s)	Planned	Origin	Reason	Reference	Details
05/07/2002 06:22:37	05/07/2002 08:02:46	6009					*Commissioning period*
07/07/2002 07:45:43	07/07/2002 08:32:33	2810					*Commissioning period*
12/07/2002 22:29:30	13/07/2002 00:42:46	7996					*Commissioning period*
13/07/2002 00:53:26	13/07/2002 02:43:15	6589					*Commissioning period*
13/07/2002 21:56:41	14/07/2002 05:20:39	26638					*Commissioning period*
14/07/2002 11:34:02	14/07/2002 13:12:13	5891					*Commissioning period*
16/07/2002 23:53:10	17/07/2002 03:07:47	11677					*Commissioning period*
17/07/2002 05:30:06	17/07/2002 06:38:52	4126					*Commissioning period*
18/07/2002 22:41:35	19/07/2002 08:59:34	37079					*Commissioning period*
19/07/2002 15:51:16	19/07/2002 17:11:04	4788					*Commissioning period*
19/07/2002 23:55:57	20/07/2002 02:20:49	8692					*Commissioning period*
20/07/2002 05:27:18	20/07/2002 13:24:50	28652					*Commissioning period*
20/07/2002 22:29:20	21/07/2002 01:48:08	11928					*Commissioning period*
21/07/2002 04:19:44	21/07/2002 07:33:01	11597					*Commissioning period*
22/07/2002 03:01:10	22/07/2002 08:02:23	18073					*Commissioning period*
23/07/2002 00:32:29	23/07/2002 02:27:04	6875	N	*n/k*	*n/k*	*n/k*	*n/k*
23/07/2002 04:14:29	23/07/2002 06:20:05	7536	N	*n/k*	*n/k*	*n/k*	*n/k*
23/07/2002 20:02:25	23/07/2002 21:41:48	5963	N	*n/k*	*n/k*	*n/k*	*n/k*
25/07/2002 22:20:31	26/07/2002 00:43:26	8575	N	*n/k*	*n/k*	*n/k*	*n/k*
26/07/2002 21:47:48	26/07/2002 23:46:24	7116	N	*n/k*	*n/k*	*n/k*	*n/k*
27/07/2002 02:00:05	27/07/2002 02:52:46	3161	N	*n/k*	*n/k*	*n/k*	*n/k*
28/07/2002 22:26:30	29/07/2002 00:49:43	8593	N	*n/k*	*n/k*	*n/k*	*n/k*
29/07/2002 02:39:41	29/07/2002 05:21:42	9721	N	*n/k*	*n/k*	*n/k*	*n/k*
30/07/2002 09:52:16	30/07/2002 14:48:38	17782	N	*n/k*	*n/k*	*n/k*	*n/k*

Gap start	Gap end	Duration (s)	Planned	Origin	Reason	Reference	Details
31/07/2002 11:01:14	31/07/2002 12:38:02	5808	N	*n/k*	*n/k*	*n/k*	*n/k*
01/08/2002 00:47:16	01/08/2002 02:06:24	4748	N	*n/k*	*n/k*	*n/k*	*n/k*
01/08/2002 07:10:20	01/08/2002 08:46:50	5790	N	*n/k*	*n/k*	*n/k*	*n/k*
03/08/2002 23:12:22	04/08/2002 00:37:44	5122	N	*n/k*	*n/k*	*n/k*	*n/k*
04/08/2002 02:03:58	04/08/2002 03:43:20	5962	N	*n/k*	*n/k*	*n/k*	*n/k*
04/08/2002 07:28:17	04/08/2002 08:59:55	5498	N	*n/k*	*n/k*	*n/k*	*n/k*
06/08/2002 23:23:08	07/08/2002 01:06:00	6172	N	*n/k*	*n/k*	*n/k*	*n/k*
07/08/2002 02:58:37	07/08/2002 06:31:51	12794	N	*n/k*	*n/k*	*n/k*	*n/k*
10/08/2002 05:18:56	10/08/2002 06:54:32	5736	N	*n/k*	*n/k*	*n/k*	*n/k*
10/08/2002 22:04:54	10/08/2002 23:40:31	5737	N	*n/k*	*n/k*	*n/k*	*n/k*
11/08/2002 03:22:39	11/08/2002 06:59:24	13005	N	*n/k*	*n/k*	*n/k*	*n/k*
11/08/2002 21:44:49	12/08/2002 01:57:30	15161	N	*n/k*	*n/k*	*n/k*	*n/k*
13/08/2002 19:00:52	13/08/2002 22:23:14	12142	N	*n/k*	*n/k*	*n/k*	*n/k*
13/08/2002 22:23:29	14/08/2002 04:23:40	21611	N	*n/k*	*n/k*	*n/k*	*n/k*
15/08/2002 01:08:38	15/08/2002 06:23:28	18890	N	*n/k*	*n/k*	*n/k*	*n/k*
15/08/2002 11:53:54	15/08/2002 13:05:02	4268	N	*n/k*	*n/k*	*n/k*	*n/k*
16/08/2002 17:26:19	16/08/2002 19:04:30	5891	N	*n/k*	*n/k*	*n/k*	*n/k*
18/08/2002 17:44:50	18/08/2002 18:03:08	1098	N	*n/k*	*n/k*	*n/k*	*n/k*
18/08/2002 19:07:16	18/08/2002 19:37:37	1821	N	*n/k*	*n/k*	*n/k*	*n/k*
19/08/2002 00:34:22	19/08/2002 02:09:59	5737	N	*n/k*	*n/k*	*n/k*	*n/k*
25/08/2002 02:40:55	25/08/2002 06:14:29	12814	N	*n/k*	*n/k*	*n/k*	*n/k*
26/08/2002 17:13:27	26/08/2002 20:33:57	12030	N	*n/k*	*n/k*	*n/k*	*n/k*
28/08/2002 02:25:20	28/08/2002 03:04:46	2366	N	*n/k*	*n/k*	*n/k*	*n/k*
03/09/2002 06:52:41	03/09/2002 08:09:05	4584	N	*n/k*	*n/k*	*n/k*	*n/k*

Gap start	Gap end	Duration (s)	Planned	Origin	Reason	Reference	Details
06/09/2002 21:31:05	06/09/2002 23:11:36	6031	N	*n/k*	*n/k*	*n/k*	*n/k*
07/09/2002 23:19:23	08/09/2002 00:57:03	5860	N	*n/k*	*n/k*	*n/k*	*n/k*
08/09/2002 03:06:33	08/09/2002 03:47:48	2475	N	*n/k*	*n/k*	*n/k*	*n/k*
08/09/2002 05:34:34	12/09/2002 13:33:50	374356	Y	On-board	Platform OCM	RAL Status	Planned OCM
21/09/2002 00:39:08	21/09/2002 02:43:13	7445	N	*n/k*	*n/k*	*n/k*	*n/k*
25/09/2002 21:32:37	25/09/2002 23:15:40	6183	N	*n/k*	*n/k*	*n/k*	*n/k*
28/09/2002 16:40:44	29/09/2002 09:32:46	60722	N	*n/k*	*n/k*	*n/k*	*n/k*
29/09/2002 12:54:08	29/09/2002 16:07:20	11592	N	*n/k*	*n/k*	*n/k*	*n/k*
29/09/2002 17:45:43	30/09/2002 03:52:20	36397	N	*n/k*	*n/k*	*n/k*	*n/k*
30/09/2002 09:02:14	30/09/2002 10:39:40	5846	N	*n/k*	*n/k*	*n/k*	*n/k*
02/10/2002 23:25:59	03/10/2002 01:23:43	7064	N	*n/k*	*n/k*	*n/k*	*n/k*
04/10/2002 05:49:04	04/10/2002 06:56:58	4074	N	*n/k*	*n/k*	*n/k*	*n/k*
05/10/2002 00:09:30	05/10/2002 02:59:09	10179	N	*n/k*	*n/k*	*n/k*	*n/k*
05/10/2002 07:39:48	05/10/2002 12:36:37	17809	N	*n/k*	*n/k*	*n/k*	*n/k*
05/10/2002 23:02:33	06/10/2002 02:34:54	12741	N	*n/k*	*n/k*	*n/k*	*n/k*
06/10/2002 03:14:20	06/10/2002 05:13:08	7128	N	*n/k*	*n/k*	*n/k*	*n/k*
06/10/2002 22:59:12	07/10/2002 04:11:06	18714	N	*n/k*	*n/k*	*n/k*	*n/k*
07/10/2002 05:57:51	07/10/2002 07:02:23	3872	N	*n/k*	*n/k*	*n/k*	*n/k*
07/10/2002 07:13:06	07/10/2002 08:44:31	5485	N	*n/k*	*n/k*	*n/k*	*n/k*
17/10/2002 00:01:37	17/10/2002 03:16:41	11704	N	*n/k*	*n/k*	*n/k*	*n/k*
17/10/2002 05:32:07	17/10/2002 06:49:15	4628	N	*n/k*	*n/k*	*n/k*	*n/k*
18/10/2002 00:02:42	18/10/2002 03:42:47	13205	N	*n/k*	*n/k*	*n/k*	*n/k*
18/10/2002 07:42:50	18/10/2002 09:38:17	6927	N	*n/k*	*n/k*	*n/k*	*n/k*
18/10/2002 22:50:40	19/10/2002 01:06:11	8131	N	*n/k*	*n/k*	*n/k*	*n/k*

Gap start	Gap end	Duration (s)	Planned	Origin	Reason	Reference	Details
19/10/2002 01:16:48	19/10/2002 04:49:24	12756	N	n/k	n/k	n/k	n/k
19/10/2002 06:35:27	19/10/2002 07:23:23	2876	N	n/k	n/k	n/k	n/k
19/10/2002 22:17:30	20/10/2002 00:17:49	7219	N	n/k	n/k	n/k	n/k
20/10/2002 02:30:50	20/10/2002 03:59:11	5301	N	n/k	n/k	n/k	n/k
20/10/2002 05:43:07	20/10/2002 06:54:02	4255	N	n/k	n/k	n/k	n/k
20/10/2002 21:44:50	21/10/2002 01:33:37	13727	N	n/k	n/k	n/k	n/k
21/10/2002 03:58:04	21/10/2002 04:20:43	1359	N	n/k	n/k	n/k	n/k
21/10/2002 22:59:40	22/10/2002 06:46:23	28003	N	n/k	n/k	n/k	n/k
22/10/2002 07:05:19	22/10/2002 08:40:55	5736	N	n/k	n/k	n/k	n/k
22/10/2002 22:23:30	23/10/2002 00:26:13	7363	N	n/k	n/k	n/k	n/k
23/10/2002 13:38:31	23/10/2002 15:14:40	5769	N	n/k	n/k	n/k	n/k
23/10/2002 21:50:46	24/10/2002 02:54:13	18207	N	n/k	n/k	n/k	n/k
24/10/2002 04:11:57	24/10/2002 06:29:06	8229	N	n/k	n/k	n/k	n/k
26/10/2002 21:56:42	27/10/2002 02:10:30	15228	N	n/k	n/k	n/k	n/k
28/10/2002 00:56:35	28/10/2002 02:46:30	6595	N	n/k	n/k	n/k	n/k
29/10/2002 00:45:44	29/10/2002 03:40:26	10482	N	n/k	n/k	n/k	n/k
30/10/2002 00:26:40	30/10/2002 02:16:29	6589	N	n/k	n/k	n/k	n/k
30/10/2002 02:52:22	30/10/2002 04:27:59	5737	N	n/k	n/k	n/k	n/k
31/10/2002 14:25:56	31/10/2002 16:03:47	5871	N	n/k	n/k	n/k	n/k
31/10/2002 22:41:35	01/11/2002 04:31:25	20990	N	n/k	n/k	n/k	n/k
01/11/2002 18:47:39	01/11/2002 20:26:25	5926	N	n/k	n/k	n/k	n/k
01/11/2002 22:08:34	02/11/2002 03:41:25	19971	N	n/k	n/k	n/k	n/k
02/11/2002 21:36:00	03/11/2002 01:50:17	15257	N	n/k	n/k	n/k	n/k
07/11/2002 00:41:57	07/11/2002 02:22:27	6030	N	n/k	n/k	n/k	n/k

Gap start	Gap end	Duration (s)	Planned	Origin	Reason	Reference	Details
10/11/2002 02:28:13	10/11/2002 05:49:09	12056	N	*n/k*	*n/k*	*n/k*	*n/k*
14/11/2002 16:18:24	14/11/2002 17:04:16	2752	N	*n/k*	*n/k*	*n/k*	*n/k*
18/11/2002 04:38:09	20/11/2002 15:40:53	212564	Y	On-board	Service Module switch-off	RAL Status	SM SOL as precaution for Leonids
28/11/2002 03:04:02	28/11/2002 04:44:41	6039	N	*n/k*	*n/k*	*n/k*	*n/k*
29/11/2002 12:34:59	29/11/2002 15:29:00	10441	N	*n/k*	*n/k*	*n/k*	*n/k*
01/12/2002 19:32:32	01/12/2002 21:08:11	5739	N	*n/k*	*n/k*	*n/k*	*n/k*
02/12/2002 12:18:33	02/12/2002 13:54:10	5737	N	*n/k*	*n/k*	*n/k*	*n/k*
08/12/2002 19:12:26	08/12/2002 20:48:03	5737	N	*n/k*	*n/k*	*n/k*	*n/k*
10/12/2002 11:26:48	10/12/2002 13:02:25	5737	N	*n/k*	*n/k*	*n/k*	*n/k*
12/12/2002 07:02:22	12/12/2002 10:18:35	11773	N	*n/k*	*n/k*	*n/k*	*n/k*
13/12/2002 01:28:57	13/12/2002 06:25:46	17809	N	*n/k*	*n/k*	*n/k*	*n/k*
14/12/2002 21:18:04	14/12/2002 23:03:04	6300	N	*n/k*	*n/k*	*n/k*	*n/k*
17/12/2002 22:50:49	18/12/2002 02:07:02	11773	N	*n/k*	*n/k*	*n/k*	*n/k*
18/12/2002 02:22:55	18/12/2002 14:00:01	41826	Y	On-board	Platform OCM	RAL Status	Planned OCM
20/12/2002 09:57:40	20/12/2002 18:09:39	29519	N	*n/k*	*n/k*	*n/k*	*n/k*
21/12/2002 09:25:32	21/12/2002 17:38:21	29569	N	*n/k*	*n/k*	*n/k*	*n/k*
24/12/2002 19:24:14	24/12/2002 21:01:41	5847	N	*n/k*	*n/k*	*n/k*	*n/k*
30/12/2002 17:07:50	30/12/2002 17:53:57	2767	N	*n/k*	*n/k*	*n/k*	*n/k*
30/12/2002 18:20:40	30/12/2002 19:31:38	4258	N	*n/k*	*n/k*	*n/k*	*n/k*
30/12/2002 20:16:52	30/12/2002 21:15:42	3530	N	*n/k*	*n/k*	*n/k*	*n/k*

Table 8. Level 0 gaps for 2003

Gap start	Gap end	Duration (s)	Planned	Origin	Reason	Reference	Details
01/01/2003 19:58:25	01/01/2003 21:34:02	5737	N	n/k	n/k	n/k	n/k
03/01/2003 12:36:55	03/01/2003 17:31:26	17671	N	n/k	n/k	n/k	n/k
04/01/2003 06:12:47	04/01/2003 07:06:03	3196	N	n/k	n/k	n/k	n/k
04/01/2003 08:19:58	04/01/2003 08:45:11	1513	N	n/k	n/k	n/k	n/k
05/01/2003 16:11:21	05/01/2003 17:46:58	5737	N	n/k	n/k	n/k	n/k
12/01/2003 21:05:13	12/01/2003 22:48:42	6209	N	n/k	n/k	n/k	n/k
13/01/2003 05:39:30	13/01/2003 07:22:38	6188	N	n/k	n/k	n/k	n/k
14/01/2003 16:02:14	14/01/2003 16:46:07	2633	N	n/k	n/k	n/k	n/k
15/01/2003 22:39:21	16/01/2003 00:14:58	5737	N	n/k	n/k	n/k	n/k
17/01/2003 23:36:04	18/01/2003 01:17:20	6076	N	n/k	n/k	n/k	n/k
18/01/2003 05:59:08	18/01/2003 07:34:44	5736	N	n/k	n/k	n/k	n/k
18/01/2003 08:06:17	18/01/2003 09:46:25	6008	N	n/k	n/k	n/k	n/k
18/01/2003 21:04:31	18/01/2003 22:40:08	5737	N	n/k	n/k	n/k	n/k
20/01/2003 11:30:31	20/01/2003 12:02:14	1903	N	n/k	n/k	n/k	n/k
20/01/2003 13:41:40	20/01/2003 15:20:11	5911	N	n/k	n/k	n/k	n/k
26/01/2003 13:53:14	26/01/2003 15:31:00	5866	N	n/k	n/k	n/k	n/k
26/01/2003 20:12:48	26/01/2003 21:48:25	5737	N	n/k	n/k	n/k	n/k
27/01/2003 19:41:11	27/01/2003 21:16:48	5737	N	n/k	n/k	n/k	n/k
31/01/2003 04:30:47	31/01/2003 06:10:47	6000	N	n/k	n/k	n/k	n/k
01/02/2003 18:43:41	01/02/2003 20:19:18	5737	N	n/k	n/k	n/k	n/k
02/02/2003 14:50:52	02/02/2003 16:26:29	5737	N	n/k	n/k	n/k	n/k
03/02/2003 17:55:40	03/02/2003 19:33:46	5886	N	n/k	n/k	n/k	n/k
04/02/2003 18:49:25	04/02/2003 20:25:03	5738	N	n/k	n/k	n/k	n/k

Gap start	Gap end	Duration (s)	Planned	Origin	Reason	Reference	Details
09/02/2003 17:45:55	09/02/2003 18:07:00	1265	N	*n/k*	*n/k*	*n/k*	*n/k*
09/02/2003 18:12:53	09/02/2003 20:20:17	7644	N	*n/k*	*n/k*	*n/k*	*n/k*
09/02/2003 20:44:04	09/02/2003 21:20:23	2179	N	*n/k*	*n/k*	*n/k*	*n/k*
10/02/2003 11:03:55	10/02/2003 12:41:02	5827	N	*n/k*	*n/k*	*n/k*	*n/k*
12/02/2003 08:21:34	12/02/2003 09:58:40	5826	N	*n/k*	*n/k*	*n/k*	*n/k*
12/02/2003 18:13:30	12/02/2003 19:51:26	5876	N	*n/k*	*n/k*	*n/k*	*n/k*
13/02/2003 04:25:48	13/02/2003 06:04:56	5948	N	*n/k*	*n/k*	*n/k*	*n/k*
15/02/2003 02:10:52	15/02/2003 05:02:26	10294	N	*n/k*	*n/k*	*n/k*	*n/k*
17/02/2003 02:16:10	17/02/2003 03:58:31	6141	N	*n/k*	*n/k*	*n/k*	*n/k*
17/02/2003 05:40:10	17/02/2003 07:24:36	6266	N	*n/k*	*n/k*	*n/k*	*n/k*
19/02/2003 04:35:37	19/02/2003 06:15:33	5996	N	*n/k*	*n/k*	*n/k*	*n/k*
20/02/2003 05:44:53	23/02/2003 10:26:52	276119	N	On-board	Payload switch-off	RAL Status	Following a failure in a PMC procedure, the PMC was switched to SUSPEND manually by command
03/03/2003 18:00:33	03/03/2003 19:36:09	5736	N	*n/k*	*n/k*	*n/k*	*n/k*
15/03/2003 03:39:28	19/03/2003 13:22:08	380560	N	On-board	Payload switch-off	RAL Status	Subsystems unavailable - Autonomous P/L switch-off
20/03/2003 09:29:58	20/03/2003 11:07:17	5839	N	*n/k*	*n/k*	*n/k*	*n/k*
07/04/2003 18:24:14	08/04/2003 09:35:09	54655	N	*n/k*	*n/k*	*n/k*	*n/k*
09/04/2003 22:15:51	10/04/2003 05:06:30	24639	N	*n/k*	*n/k*	*n/k*	*n/k*
15/04/2003 22:28:13	16/04/2003 00:11:46	6213	N	*n/k*	*n/k*	*n/k*	*n/k*
18/04/2003 00:50:44	18/04/2003 05:56:10	18326	N	*n/k*	*n/k*	*n/k*	*n/k*
18/04/2003 22:35:05	19/04/2003 00:18:42	6217	N	*n/k*	*n/k*	*n/k*	*n/k*
27/04/2003 07:57:24	27/04/2003 09:35:00	5856	N	*n/k*	*n/k*	*n/k*	*n/k*
18/05/2003 06:21:43	20/05/2003 12:35:51	195248	Y	On-board	Payload switch-off	RAL Status	PL_SOL sent to deactivate payload units to OFF; Back to operation after PMC SW upgrade

Gap start	Gap end	Duration (s)	Planned	Origin	Reason	Reference	Details
25/05/2003 14:50:34	25/05/2003 16:25:44	5710	N	*n/k*	*n/k*	*n/k*	*n/k*
28/05/2003 23:17:28	29/05/2003 00:56:17	5929	N	*n/k*	*n/k*	*n/k*	*n/k*
02/06/2003 15:37:29	02/06/2003 17:10:37	5588	N	*n/k*	*n/k*	*n/k*	*n/k*
10/06/2003 18:05:40	10/06/2003 19:42:08	5788	N	*n/k*	*n/k*	*n/k*	*n/k*
13/06/2003 06:36:12	13/06/2003 08:18:38	6146	N	*n/k*	*n/k*	*n/k*	*n/k*
23/06/2003 08:05:02	23/06/2003 09:42:48	5866	N	*n/k*	*n/k*	*n/k*	*n/k*
23/06/2003 21:16:40	23/06/2003 23:01:35	6295	N	*n/k*	*n/k*	*n/k*	*n/k*
03/07/2003 07:53:25	03/07/2003 09:29:44	5779	N	*n/k*	*n/k*	*n/k*	*n/k*
06/07/2003 21:40:56	06/07/2003 22:51:44	4248	N	*n/k*	*n/k*	*n/k*	*n/k*
11/07/2003 07:00:40	11/07/2003 08:37:55	5835	N	*n/k*	*n/k*	*n/k*	*n/k*
15/07/2003 08:14:00	15/07/2003 09:52:30	5910	N	Ground segment	Kiruna GS	U/A list	Antenna problem. No uplink. X-band lost
30/07/2003 05:19:11	30/07/2003 06:59:13	6002	N	*n/k*	*n/k*	*n/k*	*n/k*
31/07/2003 19:41:31	31/07/2003 21:23:21	6110	N	*n/k*	*n/k*	*n/k*	*n/k*
01/08/2003 00:07:25	01/08/2003 00:49:44	2539	N	*n/k*	*n/k*	*n/k*	*n/k*
06/08/2003 11:41:06	06/08/2003 13:19:37	5911	N	*n/k*	*n/k*	*n/k*	*n/k*
22/08/2003 18:11:50	22/08/2003 19:47:39	5749	N	*n/k*	*n/k*	*n/k*	*n/k*
23/08/2003 06:04:17	23/08/2003 11:06:09	18112	N	*n/k*	*n/k*	*n/k*	*n/k*
23/08/2003 12:47:11	23/08/2003 16:01:17	11646	N	*n/k*	*n/k*	*n/k*	*n/k*
25/08/2003 18:16:49	25/08/2003 19:54:10	5841	N	Ground segment	Kiruna GS	U/A list	Pass lost due to Kircons Master Schedule failing and the STC requiring to be rebooted
27/08/2003 10:42:02	27/08/2003 12:20:00	5878	N	Ground segment	Kiruna GS	U/A list	FEC problem switch from 15m to 13m antenna
28/08/2003 08:30:46	28/08/2003 10:10:13	5967	N	*n/k*	*n/k*	*n/k*	*n/k*
29/08/2003 14:13:43	29/08/2003 15:49:20	5737	N	*n/k*	*n/k*	*n/k*	*n/k*

Gap start	Gap end	Duration (s)	Planned	Origin	Reason	Reference	Details
01/09/2003 19:35:56	01/09/2003 21:17:18	6082	N	*n/k*	*n/k*	*n/k*	*n/k*
04/09/2003 21:23:56	07/09/2003 09:55:26	217890	N	On-board	Payload switch-off	RAL Status	PLSOL; AATSR recovered from PLSOL in Measurement. Ref.: ENV-738
07/09/2003 11:33:37	07/09/2003 13:05:15	5498	N	*n/k*	*n/k*	*n/k*	*n/k*
16/09/2003 17:15:04	16/09/2003 18:23:32	4108	N	Ground segment	Kiruna GS	U/A list	Loss of data - tracking incorrect; Partial loss of S and X-Band data
18/09/2003 23:48:33	19/09/2003 01:24:10	5737	N	*n/k*	*n/k*	*n/k*	*n/k*
27/09/2003 02:17:58	27/09/2003 03:53:35	5737	N	*n/k*	*n/k*	*n/k*	*n/k*
29/09/2003 21:38:55	29/09/2003 23:19:35	6040	N	*n/k*	*n/k*	*n/k*	*n/k*
01/10/2003 09:01:43	01/10/2003 10:41:16	5973	N	*n/k*	*n/k*	*n/k*	*n/k*
08/10/2003 11:35:34	08/10/2003 13:11:11	5737	N	*n/k*	*n/k*	*n/k*	*n/k*
09/10/2003 18:02:34	09/10/2003 21:22:07	11973	N	*n/k*	*n/k*	*n/k*	*n/k*
10/10/2003 05:56:22	10/10/2003 09:17:59	12097	N	*n/k*	*n/k*	*n/k*	*n/k*
26/10/2003 14:13:03	26/10/2003 15:51:20	5897	N	*n/k*	*n/k*	*n/k*	*n/k*
28/10/2003 02:53:11	28/10/2003 06:30:08	13017	Y	On-board	Platform OCM	RAL Status	Planned OCM
06/11/2003 01:43:25	06/11/2003 03:23:38	6013	N	*n/k*	*n/k*	*n/k*	*n/k*
06/11/2003 04:41:38	06/11/2003 06:17:14	5736	N	*n/k*	*n/k*	*n/k*	*n/k*
07/11/2003 06:16:18	07/11/2003 09:06:49	10231	N	*n/k*	*n/k*	*n/k*	*n/k*
03/12/2003 05:59:23	05/12/2003 11:41:23	193320	N	On-board	Payload switch-off	RAL Status	PLSOL; AATSR recovered from PLSOL in Measurement. Ref AR ENV-738
29/12/2003 01:54:59	29/12/2003 23:37:48	78169	N	*n/k*	*n/k*	*n/k*	*n/k*

Table 9. Level 0 gaps for 2004

Gap start	Gap end	Duration (s)	Planned	Origin	Reason	Reference	Details
07/01/2004 22:19:24	07/01/2004 23:55:01	5737	N	*n/k*	*n/k*	*n/k*	*n/k*
19/01/2004 17:56:02	19/01/2004 19:30:01	5639	N	*n/k*	*n/k*	*n/k*	*n/k*
20/01/2004 05:46:21	20/01/2004 07:32:00	6339	N	*n/k*	*n/k*	*n/k*	*n/k*
20/01/2004 12:31:41	20/01/2004 14:09:20	5859	N	*n/k*	*n/k*	*n/k*	*n/k*
04/02/2004 02:40:07	04/02/2004 08:03:08	19381	Y	On-board	Platform OCM	RAL Status	Planned OCM
11/02/2004 14:18:37	11/02/2004 17:33:52	11715	N	*n/k*	*n/k*	*n/k*	*n/k*
18/02/2004 03:32:38	18/02/2004 05:08:15	5737	N	*n/k*	*n/k*	*n/k*	*n/k*
18/02/2004 09:00:35	18/02/2004 10:38:38	5883	N	*n/k*	*n/k*	*n/k*	*n/k*
29/02/2004 23:59:55	01/03/2004 00:53:33	3218	N	*n/k*	*n/k*	*n/k*	*n/k*
01/03/2004 04:19:14	01/03/2004 05:59:48	6034	N	*n/k*	*n/k*	*n/k*	*n/k*
17/03/2004 22:19:24	17/03/2004 23:55:01	5737	N	*n/k*	*n/k*	*n/k*	*n/k*
29/03/2004 21:01:47	29/03/2004 22:37:24	5737	N	*n/k*	*n/k*	*n/k*	*n/k*
31/03/2004 01:31:58	01/04/2004 00:55:21	84203	N	*n/k*	*n/k*	*n/k*	*n/k*
09/04/2004 22:13:46	09/04/2004 23:55:11	6085	N	*n/k*	*n/k*	*n/k*	*n/k*
14/04/2004 02:45:07	14/04/2004 13:30:08	38701	Y	On-board	Platform OCM & MIPAS	U/A list	Planned OCM
16/04/2004 21:51:41	16/04/2004 23:35:12	6211	N	*n/k*	*n/k*	*n/k*	*n/k*
17/04/2004 21:20:11	17/04/2004 23:00:20	6009	N	*n/k*	*n/k*	*n/k*	*n/k*
19/04/2004 03:39:07	19/04/2004 05:20:19	6072	N	*n/k*	*n/k*	*n/k*	*n/k*
20/04/2004 03:07:09	20/04/2004 06:29:07	12118	N	*n/k*	*n/k*	*n/k*	*n/k*
20/04/2004 21:24:25	21/04/2004 02:34:18	18593	N	*n/k*	*n/k*	*n/k*	*n/k*
28/04/2004 05:38:19	28/04/2004 07:21:34	6195	N	*n/k*	*n/k*	*n/k*	*n/k*
04/05/2004 09:13:16	04/05/2004 15:46:27	23591	N	*n/k*	*n/k*	*n/k*	*n/k*
02/06/2004 22:16:35	03/06/2004 00:21:29	7494	N	*n/k*	*n/k*	*n/k*	*n/k*

Gap start	Gap end	Duration (s)	Planned	Origin	Reason	Reference	Details
08/06/2004 13:56:44	10/06/2004 16:21:47	181503	N	On-board	Platform HSM anomaly	U/A List	HSM anomaly for AATSR, MIPAS, MERIS. AATSR in Heater mode during HSM reset then back to Measurement
11/06/2004 13:53:34	11/06/2004 15:29:11	5737	N	*n/k*	*n/k*	*n/k*	*n/k*
16/06/2004 19:52:19	16/06/2004 21:31:17	5938	N	*n/k*	*n/k*	*n/k*	*n/k*
19/06/2004 04:12:12	19/06/2004 05:36:37	5065	N	*n/k*	*n/k*	*n/k*	*n/k*
19/06/2004 21:04:27	19/06/2004 22:51:01	6394	N	Artemis	Not given	U/A List	Ref: ART-ENV-UNA-2004-021 / Service request affected: 2534
21/06/2004 03:02:34	21/06/2004 04:33:52	5478	N	*n/k*	*n/k*	*n/k*	*n/k*
21/06/2004 04:43:22	21/06/2004 06:13:42	5420	N	*n/k*	*n/k*	*n/k*	*n/k*
23/06/2004 02:14:56	23/06/2004 03:28:36	4420	N	*n/k*	*n/k*	*n/k*	*n/k*
24/06/2004 01:45:03	24/06/2004 02:57:56	4373	N	*n/k*	*n/k*	*n/k*	*n/k*
04/07/2004 11:05:09	04/07/2004 12:14:07	4138	N	*n/k*	*n/k*	*n/k*	*n/k*
09/07/2004 22:20:31	09/07/2004 23:20:54	3623	N	Artemis	Not given	U/A List	Ref: ART-ENV-UNA-2004-024 / Service request affected: 2685
10/07/2004 00:17:17	10/07/2004 01:52:54	5737	N	*n/k*	*n/k*	*n/k*	*n/k*
14/07/2004 07:34:55	14/07/2004 10:21:15	9980	N	*n/k*	*n/k*	*n/k*	*n/k*
14/07/2004 11:59:48	14/07/2004 18:30:31	23443	N	*n/k*	*n/k*	*n/k*	*n/k*
17/07/2004 16:49:26	17/07/2004 19:50:00	10834	N	On-board	Platform HSM anomaly	U/A List	HSM input modules-anomalies (AATSR,MERIS)
20/07/2004 11:32:53	20/07/2004 12:11:58	2345	N	*n/k*	*n/k*	*n/k*	*n/k*
01/08/2004 20:47:30	02/08/2004 04:14:12	26802	N	Artemis	Not given	U/A List	Ref: ART-ENV-UNA-2004-030 / Service request affected: from 3022 to 3030
08/08/2004 11:03:52	08/08/2004 12:14:46	4254	N	*n/k*	*n/k*	*n/k*	*n/k*
10/08/2004 03:22:01	10/08/2004 06:43:40	12099	N	*n/k*	*n/k*	*n/k*	*n/k*
10/08/2004 22:14:30	11/08/2004 01:36:42	12132	N	*n/k*	*n/k*	*n/k*	*n/k*
24/08/2004 11:26:46	24/08/2004 12:11:21	2675	N	*n/k*	*n/k*	*n/k*	*n/k*

Gap start	Gap end	Duration (s)	Planned	Origin	Reason	Reference	Details
28/08/2004 09:40:37	28/08/2004 11:16:14	5737	N	*n/k*	*n/k*	*n/k*	*n/k*
30/08/2004 03:35:35	30/08/2004 05:11:12	5737	N	*n/k*	*n/k*	*n/k*	*n/k*
05/09/2004 06:26:12	05/09/2004 07:34:14	4082	N	*n/k*	*n/k*	*n/k*	*n/k*
12/09/2004 11:35:18	12/09/2004 12:11:37	2179	N	*n/k*	*n/k*	*n/k*	*n/k*
21/09/2004 03:00:08	21/09/2004 18:00:10	54002	Y	On-board	Platform OCM	RAL Status	Planned OCM
15/10/2004 11:37:18	15/10/2004 13:15:54	5916	N	*n/k*	*n/k*	*n/k*	*n/k*
16/10/2004 06:37:26	16/10/2004 07:44:04	3998	N	*n/k*	*n/k*	*n/k*	*n/k*
16/10/2004 17:40:25	16/10/2004 20:58:11	11866	N	*n/k*	*n/k*	*n/k*	*n/k*
17/10/2004 06:04:13	17/10/2004 08:55:03	10250	N	*n/k*	*n/k*	*n/k*	*n/k*
17/10/2004 11:04:09	17/10/2004 12:13:10	4141	N	*n/k*	*n/k*	*n/k*	*n/k*
17/10/2004 12:13:15	17/10/2004 18:42:18	23343	N	*n/k*	*n/k*	*n/k*	*n/k*
19/10/2004 23:56:45	20/10/2004 02:48:51	10326	N	*n/k*	*n/k*	*n/k*	*n/k*
02/11/2004 11:23:19	02/11/2004 12:10:58	2859	N	*n/k*	*n/k*	*n/k*	*n/k*
09/11/2004 21:15:20	10/11/2004 06:51:01	34541	N	*n/k*	*n/k*	*n/k*	*n/k*
16/11/2004 00:50:16	16/11/2004 02:24:10	5634	N	*n/k*	*n/k*	*n/k*	*n/k*
17/11/2004 20:48:34	18/11/2004 04:17:57	26963	N	*n/k*	*n/k*	*n/k*	*n/k*
19/11/2004 19:50:36	20/11/2004 01:58:07	22051	N	*n/k*	*n/k*	*n/k*	*n/k*
21/11/2004 11:05:22	21/11/2004 12:13:24	4082	N	On-board	Kiruna GS	U/A List	NO TM : CSMC SCHEDULE NOT WORKING; reason : CSMC hang
03/12/2004 00:13:41	03/12/2004 01:50:47	5826	N	*n/k*	*n/k*	*n/k*	*n/k*
04/12/2004 02:34:53	04/12/2004 04:15:56	6063	N	*n/k*	*n/k*	*n/k*	*n/k*
04/12/2004 21:29:07	05/12/2004 02:01:37	16350	N	*n/k*	*n/k*	*n/k*	*n/k*
07/12/2004 11:23:52	07/12/2004 12:10:30	2798	N	*n/k*	*n/k*	*n/k*	*n/k*
08/12/2004 21:00:01	08/12/2004 22:42:05	6124	N	*n/k*	*n/k*	*n/k*	*n/k*
08/12/2004 22:45:17	09/12/2004 00:23:45	5908	N	*n/k*	*n/k*	*n/k*	*n/k*

Gap start	Gap end	Duration (s)	Planned	Origin	Reason	Reference	Details
09/12/2004 00:26:50	09/12/2004 02:03:20	5790	N	*n/k*	*n/k*	*n/k*	*n/k*
11/12/2004 19:57:16	11/12/2004 22:50:20	10384	N	*n/k*	*n/k*	*n/k*	*n/k*
12/12/2004 00:32:31	12/12/2004 02:08:20	5749	N	*n/k*	*n/k*	*n/k*	*n/k*
13/12/2004 01:37:44	13/12/2004 02:51:23	4419	N	*n/k*	*n/k*	*n/k*	*n/k*
13/12/2004 22:13:02	14/12/2004 01:08:00	10498	N	*n/k*	*n/k*	*n/k*	*n/k*
14/12/2004 22:56:29	15/12/2004 00:29:05	5556	N	*n/k*	*n/k*	*n/k*	*n/k*
15/12/2004 00:38:11	15/12/2004 02:04:27	5176	N	*n/k*	*n/k*	*n/k*	*n/k*
15/12/2004 23:58:36	16/12/2004 01:43:44	6308	N	*n/k*	*n/k*	*n/k*	*n/k*
17/12/2004 04:03:37	17/12/2004 05:48:33	6296	N	*n/k*	*n/k*	*n/k*	*n/k*
17/12/2004 22:53:20	18/12/2004 00:52:26	7146	N	*n/k*	*n/k*	*n/k*	*n/k*
18/12/2004 20:46:00	18/12/2004 22:21:27	5727	N	*n/k*	*n/k*	*n/k*	*n/k*
18/12/2004 22:31:11	19/12/2004 00:03:33	5542	N	*n/k*	*n/k*	*n/k*	*n/k*
19/12/2004 21:58:47	19/12/2004 23:32:02	5595	N	*n/k*	*n/k*	*n/k*	*n/k*
20/12/2004 20:10:35	20/12/2004 23:07:33	10618	N	*n/k*	*n/k*	*n/k*	*n/k*
21/12/2004 03:41:09	21/12/2004 07:02:51	12102	N	*n/k*	*n/k*	*n/k*	*n/k*
22/12/2004 00:18:22	22/12/2004 06:31:12	22370	N	*n/k*	*n/k*	*n/k*	*n/k*
23/12/2004 04:19:31	23/12/2004 05:59:01	5970	N	*n/k*	*n/k*	*n/k*	*n/k*
23/12/2004 21:33:08	24/12/2004 07:07:10	34442	N	*n/k*	*n/k*	*n/k*	*n/k*
25/12/2004 04:57:28	25/12/2004 06:35:45	5897	N	*n/k*	*n/k*	*n/k*	*n/k*
25/12/2004 20:59:10	26/12/2004 04:25:16	26766	N	*n/k*	*n/k*	*n/k*	*n/k*
26/12/2004 11:05:17	26/12/2004 12:11:39	3982	N	*n/k*	*n/k*	*n/k*	*n/k*
26/12/2004 20:25:19	26/12/2004 23:17:47	10348	N	*n/k*	*n/k*	*n/k*	*n/k*
27/12/2004 03:52:22	27/12/2004 07:12:40	12018	N	*n/k*	*n/k*	*n/k*	*n/k*
27/12/2004 22:47:57	28/12/2004 05:02:34	22477	N	*n/k*	*n/k*	*n/k*	*n/k*

Gap start	Gap end	Duration (s)	Planned	Origin	Reason	Reference	Details
28/12/2004 21:03:15	29/12/2004 06:10:42	32847	N	*n/k*	*n/k*	*n/k*	*n/k*
30/12/2004 21:07:36	31/12/2004 00:33:06	12330	N	*n/k*	*n/k*	*n/k*	*n/k*

Table 10. Level 0 gaps for 2005

Gap start	Gap end	Duration (s)	Planned	Origin	Reason	Reference	Details
01/01/2005 20:38:59	02/01/2005 01:10:23	16284	N	*n/k*	*n/k*	*n/k*	*n/k*
02/01/2005 04:04:45	02/01/2005 07:27:53	12188	N	*n/k*	*n/k*	*n/k*	*n/k*
02/01/2005 20:02:57	03/01/2005 00:38:05	16508	N	*n/k*	*n/k*	*n/k*	*n/k*
04/01/2005 23:38:02	05/01/2005 01:14:43	5801	N	*n/k*	*n/k*	*n/k*	*n/k*
05/01/2005 01:31:52	05/01/2005 03:07:29	5737	N	*n/k*	*n/k*	*n/k*	*n/k*
05/01/2005 10:19:20	05/01/2005 11:59:02	5982	N	*n/k*	*n/k*	*n/k*	*n/k*
06/01/2005 00:46:28	06/01/2005 02:21:10	5682	N	*n/k*	*n/k*	*n/k*	*n/k*
06/01/2005 19:41:00	06/01/2005 22:32:25	10285	N	*n/k*	*n/k*	*n/k*	*n/k*
07/01/2005 03:00:04	07/01/2005 13:00:06	36002	Y	On-board	Platform OCM	U/A list	Planned OCM
07/01/2005 14:14:26	07/01/2005 15:47:50	5604	N	*n/k*	*n/k*	*n/k*	*n/k*
08/01/2005 20:16:50	09/01/2005 00:51:42	16492	N	*n/k*	*n/k*	*n/k*	*n/k*
11/01/2005 11:17:23	11/01/2005 12:09:57	3154	N	*n/k*	*n/k*	*n/k*	*n/k*
11/01/2005 12:10:02	11/01/2005 13:49:16	5954	N	*n/k*	*n/k*	*n/k*	*n/k*
20/01/2005 20:27:16	20/01/2005 22:02:53	5737	N	*n/k*	*n/k*	*n/k*	*n/k*
21/01/2005 04:08:37	21/01/2005 05:47:35	5938	N	*n/k*	*n/k*	*n/k*	*n/k*
23/01/2005 17:11:50	23/01/2005 18:47:26	5736	N	*n/k*	*n/k*	*n/k*	*n/k*
26/01/2005 04:55:35	26/01/2005 06:30:29	5694	N	*n/k*	*n/k*	*n/k*	*n/k*
27/01/2005 21:31:22	28/01/2005 07:08:32	34630	N	*n/k*	*n/k*	*n/k*	*n/k*

Gap start	Gap end	Duration (s)	Planned	Origin	Reason	Reference	Details
29/01/2005 00:21:54	29/01/2005 01:26:28	3874	N	*n/k*	*n/k*	*n/k*	*n/k*
29/01/2005 11:06:55	29/01/2005 12:46:00	5945	N	Ground segment	Kiruna GS	U/A list	No TLM being received; a problem with the CSMC. Pass #15251 LOST, #15252 TLM received but unable to command.
29/01/2005 22:16:55	29/01/2005 23:49:48	5573	N	*n/k*	*n/k*	*n/k*	*n/k*
29/01/2005 23:53:31	30/01/2005 04:25:19	16308	N	*n/k*	*n/k*	*n/k*	*n/k*
30/01/2005 04:25:36	30/01/2005 06:05:54	6018	N	*n/k*	*n/k*	*n/k*	*n/k*
31/01/2005 00:59:24	31/01/2005 07:15:09	22545	N	*n/k*	*n/k*	*n/k*	*n/k*
01/02/2005 02:13:09	01/02/2005 03:19:28	3979	N	*n/k*	*n/k*	*n/k*	*n/k*
02/02/2005 04:31:15	02/02/2005 06:11:22	6007	N	*n/k*	*n/k*	*n/k*	*n/k*
02/02/2005 21:44:10	02/02/2005 23:39:45	6935	N	*n/k*	*n/k*	*n/k*	*n/k*
04/02/2005 22:21:38	05/02/2005 06:15:58	28460	N	*n/k*	*n/k*	*n/k*	*n/k*
05/02/2005 20:34:52	06/02/2005 07:28:07	39195	N	*n/k*	*n/k*	*n/k*	*n/k*
06/02/2005 20:07:48	07/02/2005 06:54:11	38783	N	*n/k*	*n/k*	*n/k*	*n/k*
08/02/2005 01:46:23	08/02/2005 06:19:37	16394	N	*n/k*	*n/k*	*n/k*	*n/k*
09/02/2005 11:58:05	09/02/2005 13:34:08	5763	N	*n/k*	*n/k*	*n/k*	*n/k*
11/02/2005 00:13:36	11/02/2005 01:07:44	3248	N	*n/k*	*n/k*	*n/k*	*n/k*
11/02/2005 01:52:24	11/02/2005 03:05:16	4372	N	*n/k*	*n/k*	*n/k*	*n/k*
11/02/2005 04:47:56	11/02/2005 06:28:39	6043	N	*n/k*	*n/k*	*n/k*	*n/k*
13/02/2005 03:44:49	13/02/2005 05:25:01	6012	N	*n/k*	*n/k*	*n/k*	*n/k*
25/02/2005 06:57:28	25/02/2005 08:38:56	6088	N	Ground segment	Kiruna GS	U/A list	W/S AT KIRUNA CRASHED. LATE AOS. X-BAND data lost
11/03/2005 13:13:48	11/03/2005 14:33:13	4765	N	*n/k*	*n/k*	*n/k*	*n/k*
11/03/2005 20:56:00	11/03/2005 22:31:36	5736	N	*n/k*	*n/k*	*n/k*	*n/k*
15/03/2005 06:25:14	15/03/2005 07:30:40	3926	N	*n/k*	*n/k*	*n/k*	*n/k*

Gap start	Gap end	Duration (s)	Planned	Origin	Reason	Reference	Details
17/03/2005 01:00:06	17/03/2005 13:00:08	43202	Y	On-board	Platform OCM	U/A list	Planned OCM
17/03/2005 14:46:40	17/03/2005 16:19:49	5589	N	*n/k*	*n/k*	*n/k*	*n/k*
19/03/2005 21:29:13	19/03/2005 22:20:49	3096	N	Artemis	APC anomaly	U/A list	Service affected : SR_5992: APC entered into Recovery Mode. The ENVISAT service has been aborted due to a wrong loading of the related Autotracking Table."
06/04/2005 22:19:24	06/04/2005 23:55:01	5737	N	*n/k*	*n/k*	*n/k*	*n/k*
12/04/2005 17:44:09	12/04/2005 19:23:49	5980	N	Ground segment	Kiruna GS	U/A list	Receiver lock problem at the beginning of the pass and data drops on both links during the pass
22/04/2005 19:08:54	22/04/2005 20:48:16	5962	N	Ground segment	Kiruna GS	U/A list	XDC blued out, no Low Rate X-Band data received
23/04/2005 05:56:50	23/04/2005 07:05:15	4105	N	*n/k*	*n/k*	*n/k*	*n/k*
24/04/2005 13:14:47	24/04/2005 14:51:28	5801	N	Ground segment	Kiruna GS	U/A list	Lost monitoring and control of XDC. Some of the X-band data downlinked was lost.
20/05/2005 07:56:43	20/05/2005 11:16:45	12002	N	Ground segment	Kiruna GS	U/A list	X-band lost for 2 passes due to the jobs for the 13m antenna (KIR-2) not being configured correctly
15/06/2005 04:51:14	15/06/2005 06:31:12	5998	N	*n/k*	*n/k*	*n/k*	*n/k*
27/06/2005 20:45:37	28/06/2005 00:06:36	12059	N	*n/k*	*n/k*	*n/k*	*n/k*
28/06/2005 04:42:33	28/06/2005 06:22:34	6001	N	*n/k*	*n/k*	*n/k*	*n/k*
29/06/2005 23:05:33	30/06/2005 00:46:31	6058	N	*n/k*	*n/k*	*n/k*	*n/k*
30/06/2005 01:00:27	30/06/2005 02:36:04	5737	N	*n/k*	*n/k*	*n/k*	*n/k*
09/07/2005 18:16:10	09/07/2005 19:55:33	5963	N	Ground segment	Kiruna GS	U/A list	Power outage at Kiruna GS, no TM/TC pass lost.
20/07/2005 01:54:38	20/07/2005 03:09:19	4481	N	*n/k*	*n/k*	*n/k*	*n/k*
28/07/2005 08:27:43	28/07/2005 10:09:19	6096	N	*n/k*	*n/k*	*n/k*	*n/k*
16/08/2005 21:14:49	16/08/2005 21:53:50	2341	N	*n/k*	*n/k*	*n/k*	*n/k*
18/08/2005 09:09:51	18/08/2005 10:49:16	5965	N	*n/k*	*n/k*	*n/k*	*n/k*
24/08/2005 22:19:24	24/08/2005 23:55:01	5737	N	*n/k*	*n/k*	*n/k*	*n/k*

Gap start	Gap end	Duration (s)	Planned	Origin	Reason	Reference	Details
29/08/2005 05:35:16	29/08/2005 07:15:12	5996	N	Artemis	APC anomaly	U/A list	UA Report 2005/029: ARTEMIS has triggered a spurious anomaly on the APC which went to STOPPED mode. The APC has been reset
03/09/2005 23:31:31	04/09/2005 01:09:14	5863	N	Artemis	Error loading autotracking table	U/A List	Service affected: SR_8361. ENVISAT service didn't start due to a wrong loading of the related Autotracking Table.
07/09/2005 04:20:09	07/09/2005 13:40:11	33602	Y	On-board	Platform OCM	RAL Status	Planned OCM
10/09/2005 10:25:52	10/09/2005 12:05:46	5994	N	*n/k*	*n/k*	*n/k*	*n/k*
12/09/2005 03:12:24	12/09/2005 04:53:54	6090	N	Artemis	APC anomaly	U/A List	Service affected: SR_8476. Sub-System: APC. ARTEMIS has triggered a spurious anomaly on the APC, which went to STOPPED mode
14/09/2005 22:45:13	14/09/2005 23:35:49	3036	N	*n/k*	*n/k*	*n/k*	*n/k*
28/09/2005 22:19:24	28/09/2005 23:55:01	5737	N	*n/k*	*n/k*	*n/k*	*n/k*
21/10/2005 23:22:30	22/10/2005 02:14:21	10311	N	Artemis	AOCS/APC anomaly	U/A List	ARTEMIS has triggered a spurious anomaly Level2A Service affected: SR_9073. Sub-System: AOCS, APC
13/11/2005 22:58:33	14/11/2005 06:54:18	28545	N	Artemis	APC command anomaly	U/A List	APC commands not generated by MPS; Missing ENVISAT APC commands have been restored. Ref.: AR ENV-938.
26/11/2005 20:20:53	26/11/2005 22:50:00	8947	N	*n/k*	*n/k*	*n/k*	*n/k*
02/12/2005 21:20:50	03/12/2005 02:19:18	17908	N	*n/k*	*n/k*	*n/k*	*n/k*
19/12/2005 19:21:00	19/12/2005 20:56:00	5737	N				Data existed in previous L0 dataset
22/12/2005 09:23:00	22/12/2005 12:39:00	11773	N				Data existed in previous L0 dataset
24/12/2005 02:34:18	24/12/2005 04:17:24	6186	N	*n/k*	*n/k*	*n/k*	*n/k*
24/12/2005 20:18:53	24/12/2005 23:11:22	10349	N	*n/k*	*n/k*	*n/k*	*n/k*
25/12/2005 22:38:42	26/12/2005 00:21:14	6152	N	*n/k*	*n/k*	*n/k*	*n/k*
26/12/2005 04:53:18	26/12/2005 06:34:13	6055	N	*n/k*	*n/k*	*n/k*	*n/k*
27/12/2005 06:02:36	27/12/2005 13:48:36	27960	N	*n/k*	*n/k*	*n/k*	*n/k*

Gap start	Gap end	Duration (s)	Planned	Origin	Reason	Reference	Details
31/12/2005 03:57:01	31/12/2005 06:14:05	8224	N	Artemis	APC anomaly	U/A List	APC remained in Acquiring mode and then switched to Stopped mode. SR_10150. ARTEMIS / ENVISAT UNA 2005/048

Table 11. Level 0 gaps for 2006

Gap start	Gap end	Duration (s)	Planned	Origin	Reason	Reference	Details
10/01/2006 00:59:58	10/01/2006 13:00:00	43202	Y	On-board	Platform OCM	RAL Status	Planned OCM
24/01/2006 21:55:28	24/01/2006 23:35:32	6004	N	Artemis	AOCC scheduler error	U/A list	U/A ref 2006/006. ARTEMIS has not executed the service due to a scheduler error at AOCC. SR_10541
10/02/2006 02:26:19	10/02/2006 04:07:48	6089	N	n/k	n/k	n/k	n/k
14/03/2006 22:55:20	15/03/2006 00:35:16	5996	N	n/k	n/k	n/k	n/k
27/03/2006 05:33:50	27/03/2006 07:13:51	6001	N	n/k	n/k	n/k	n/k
28/03/2006 00:44:57	28/03/2006 12:59:58	44101	Y	On-board	Platform OCM	RAL Status	Planned OCM
06/04/2006 00:45:53	08/04/2006 18:38:15	237142	N	On-board	SM anomaly	U/A list	06/04/2006 02:09:26 08/04/2006 18:38:12 SM DSL after memory reconfiguration due to SM OBDH anomalies
28/04/2006 07:09:17	28/04/2006 11:36:26	16029	N	n/k	n/k	n/k	n/k
05/05/2006 17:48:42	05/05/2006 21:08:14	11972	N	Ground segment	Kiruna GS	U/A list	NO TLM Rxd due to problems at KIRUNA.Whole pass lost. Problems still persist at KIRUNA. No TLM received from AOS until 21:14:18 on TM LINK KIR2. Still no Uplink U/A report 2006/0148
29/05/2006 20:15:21	30/05/2006 05:22:53	32852	N	n/k	n/k	n/k	n/k
23/06/2006 20:28:26	24/06/2006 07:17:39	38953	N	n/k	n/k	n/k	n/k
29/06/2006 23:34:17	30/06/2006 01:14:19	6002	N	n/k	n/k	n/k	n/k
07/07/2006 00:55:33	07/07/2006 02:05:40	4207	N	n/k	n/k	n/k	n/k
04/08/2006 01:26:31	08/08/2006 13:11:07	387876	N	On-board	AATSR anomaly	U/A list	AATSR IS IN RS/WT/INI

Gap start	Gap end	Duration (s)	Planned	Origin	Reason	Reference	Details
09/08/2006 22:19:24	09/08/2006 23:55:01	5737	N	*n/k*	*n/k*	*n/k*	*n/k*
12/08/2006 00:24:43	12/08/2006 01:59:36	5693	N	Artemis	APC anomaly	U/A list	Report 2006/025, Service affected: SR_13695, SR_13696, Sub-System: APC, ARTEMIS triggered a double spurious APC STOPPED mode
07/09/2006 15:46:20	11/09/2006 07:07:39	314479	N	On-board	SM anomaly	U/A list	Payload off due to Service Module Anomaly (Global AOCS Surveillance triggered - STD Deviation Anomaly) Ref. AR ENV-992.
13/09/2006 00:35:04	13/09/2006 13:00:06	44702	Y	On-board	Platform OCM	U/A list	Planned OCM
26/09/2006 20:44:13	27/09/2006 07:34:28	39015	N	Artemis	APC switch-off	U/A list	26/09/2006 12:24:55 18/10/2006 02:07:13 APC, KBS1 and KBS2 unavailable due to APC switch-off.; APC back to operations via MPS scheduling (dump via Artemis). EN-UNA 2006/0341
27/09/2006 20:12:26	28/09/2006 06:59:48	38842	N	Artemis	APC switch-off	U/A list	As above - all ESRIN data lost
28/09/2006 19:41:50	29/09/2006 06:28:43	38813	N	Artemis	APC switch-off	U/A list	As above - all ESRIN data lost
29/09/2006 20:51:03	30/09/2006 05:56:37	32734	N	Artemis	APC switch-off	U/A list	As above - all ESRIN data lost
30/09/2006 20:17:44	01/10/2006 07:05:06	38842	N	Artemis	APC switch-off	U/A list	As above - all ESRIN data lost (Then switch to Svalbard Ground Station)
23/10/2006 21:34:33	23/10/2006 23:20:10	6337	N	*n/k*	*n/k*	*n/k*	*n/k*
29/10/2006 23:34:12	30/10/2006 01:14:58	6046	N	*n/k*	*n/k*	*n/k*	*n/k*
05/11/2006 23:13:36	06/11/2006 00:54:36	6060	N	*n/k*	*n/k*	*n/k*	*n/k*
12/11/2006 04:31:37	12/11/2006 06:10:54	5957	N	*n/k*	*n/k*	*n/k*	*n/k*
28/11/2006 02:23:41	30/11/2006 15:06:44	218583	Y	On-board	Payload switch-off	U/A list	SM Memory Maintenance, Ref AR ENV-1005
12/12/2006 17:07:18	16/12/2006 08:28:08	314450	N	On-board	Platform anomaly	U/A list	Due to a LVL 3 protocol error and interrupt. All Instruments are Unavailable
17/12/2006 03:23:22	17/12/2006 05:05:05	6103	N	Artemis	IU anomaly	U/A list	U/A Report 2006/038: Service affected: SR_15553 (complete loss) ARTEMIS triggered a spurious IU anomaly, which disconnect the APC from the bus.

Gap start	Gap end	Duration (s)	Planned	Origin	Reason	Reference	Details
19/12/2006 18:40:09	19/12/2006 20:01:49	4900	N	Ground segment	Kiruna GS	U/A list	Both ANTENNAS unavailable due to a configuration problem. Pass lost.
23/12/2006 03:34:26	23/12/2006 05:16:58	6152	N	n/k	n/k	n/k	n/k
23/12/2006 09:47:12	23/12/2006 11:24:12	5820	N	Ground segment	Kiruna GS	U/A list	Late AOS (AOS expected at 11:21). Antenna did not start tracking. OK after a manual STOP and Start.LR-Data lost completely. HR-Data lost partially.
24/12/2006 08:56:10	24/12/2006 12:02:00	11150	N	On-board	HSM failure	U/A list	HSM failure; HSM reset (AATSR channel)
25/12/2006 13:08:42	25/12/2006 13:41:12	1950	N	n/k	n/k	n/k	n/k
25/12/2006 18:36:40	25/12/2006 20:12:44	5764	N	n/k	n/k	n/k	n/k
31/12/2006 02:41:25	31/12/2006 04:25:10	6225	N	n/k	n/k	n/k	n/k

Table 12. Level 0 gaps for 2007

Gap start	Gap end	Duration (s)	Planned	Origin	Reason	Reference	Details
02/01/2007 22:15:05	02/01/2007 23:56:31	6086	N	n/k	n/k	n/k	n/k
12/01/2007 22:00:46	12/01/2007 23:42:49	6123	N	n/k	n/k	n/k	n/k
13/01/2007 01:23:30	13/01/2007 02:34:09	4239	N	Artemis	APC anomaly	U/A list	ARTEMIS triggered a spurious anomaly on the APC, which went into READY NO-AUTO mode. Service affected SR 16034. Sub-System APC.
22/01/2007 23:52:01	23/01/2007 12:05:01	43980	Y	On-board	Platform OCM	RAL Status	Planned OCM
31/01/2007 03:09:07	31/01/2007 06:32:12	12185	N	n/k	n/k	n/k	n/k
31/01/2007 07:40:43	31/01/2007 08:59:33	4730	N	Ground segment	Kiruna GS	U/A list	Due to a Node-1 crash, the station was not correctly configured for the pass (no TM/TC connections possible). Pass #25727 was lost
09/02/2007 19:29:10	09/02/2007 21:10:51	6101	N	n/k	n/k	n/k	n/k
15/02/2007 03:38:36	15/02/2007 07:00:56	12140	N	n/k	n/k	n/k	n/k
19/02/2007 00:20:07	19/02/2007 01:55:42	5735	N	n/k	n/k	n/k	n/k

Gap start	Gap end	Duration (s)	Planned	Origin	Reason	Reference	Details
19/02/2007 03:11:47	19/02/2007 04:53:16	6089	N	*n/k*	*n/k*	*n/k*	*n/k*
23/02/2007 12:16:15	23/02/2007 13:54:40	5905	N	Ground segment	Kiruna GS	U/A list	Pass lost. ACU processor alarm at AOS/ Node1 failure.
24/02/2007 03:55:56	24/02/2007 07:18:19	12143	N	*n/k*	*n/k*	*n/k*	*n/k*
01/03/2007 19:01:21	01/03/2007 20:41:45	6024	N	*n/k*	*n/k*	*n/k*	*n/k*
02/03/2007 05:48:44	02/03/2007 08:33:05	9861	N	*n/k*	*n/k*	*n/k*	*n/k*
04/03/2007 19:07:11	04/03/2007 20:47:16	6005	N	*n/k*	*n/k*	*n/k*	*n/k*
05/03/2007 07:10:34	05/03/2007 08:38:47	5293	N	*n/k*	*n/k*	*n/k*	*n/k*
02/04/2007 23:51:01	03/04/2007 07:00:02	25741	Y	On-board	Platform OCM	RAL Status	Planned OCM
17/04/2007 00:28:49	17/04/2007 02:04:13	5724	N	Artemis	AOC mode changed	U/A list	The ARTEMIS AOC mode has been changed in order to manage the moon eclipse manually. In this operative mode the harmonic bias is disabled, missing the required accuracy pointing. All other planned SRs have been executed successfully. UA report 2006/009
21/04/2007 18:55:21	21/04/2007 20:34:20	5939	N	Ground segment	Kiruna GS	U/A list	AOS 7 minutes late. Unable to connect to KR16. Carrier uplink not seen. Configuration problem at Kiruna.
23/04/2007 13:24:11	23/04/2007 14:41:16	4625	N	Ground segment	Kiruna GS	U/A list	Power break, loss of TLM/TC 15 m antenna stopped moving
25/04/2007 16:54:34	25/04/2007 20:12:33	11879	N	*n/k*	*n/k*	*n/k*	*n/k*
30/04/2007 04:54:10	30/04/2007 06:33:50	5980	N	Artemis	Scheduling error	U/A list	The ENVISAT service SR-17978 did not start due to a scheduling error.
02/05/2007 07:54:10	02/05/2007 11:10:22	11772	N	*n/k*	*n/k*	*n/k*	*n/k*
21/05/2007 02:37:35	21/05/2007 03:25:21	2866	N	*n/k*	*n/k*	*n/k*	*n/k*
21/05/2007 05:08:36	21/05/2007 06:24:26	4550	N	*n/k*	*n/k*	*n/k*	*n/k*
21/05/2007 07:12:39	21/05/2007 08:26:14	4415	N	*n/k*	*n/k*	*n/k*	*n/k*

Gap start	Gap end	Duration (s)	Planned	Origin	Reason	Reference	Details
22/05/2007 23:57:34	23/05/2007 02:49:09	10295	N	Artemis	AOC,APC anomaly	U/A list	Artemis UA Report 2006/011, Service affected: SR_18392 and SR_18393 (complete loss) , Sub-System: AOCS, APC
23/05/2007 04:54:09	23/05/2007 06:10:51	4602	N	Artemis	APC anomaly	U/A list	Artemis UA Report 2007/012 , Service affected: SR_18395 , Sub-System: APC
12/06/2007 18:34:07	12/06/2007 20:01:52	5265	N	Ground segment	Kiruna GS	U/A list	KIRUNA GS unavailable due to having not received up to date STDM files. Neither the 15m or 13m antenna would go to autotrack. Passes #27623 and #27624 lost
04/07/2007 20:11:18	04/07/2007 23:04:08	10370	N	*n/k*	*n/k*	*n/k*	*n/k*
13/07/2007 07:17:45	13/07/2007 08:58:16	6031	N	*n/k*	*n/k*	*n/k*	*n/k*
16/07/2007 22:05:08	17/07/2007 07:10:47	32739	Y	On-board	Platform OCM	RAL Status	Planned OCM
17/08/2007 23:22:20	18/08/2007 01:03:31	6071	N	*n/k*	*n/k*	*n/k*	*n/k*
24/09/2007 12:23:53	28/09/2007 15:11:30	355657	N	On-board	SM anomaly	U/A list	Payload switch-off due to Service Module Anomaly (Global AOCS Surveillance triggered). AATSR back operational after SM-DSL. Ref.: AR ENV-1046
16/10/2007 23:35:52	17/10/2007 01:16:16	6024	N	*n/k*	*n/k*	*n/k*	*n/k*
29/10/2007 23:25:26	30/10/2007 01:07:50	6144	N	*n/k*	*n/k*	*n/k*	*n/k*
30/10/2007 19:49:47	30/10/2007 21:25:25	5738	N	*n/k*	*n/k*	*n/k*	*n/k*
09/11/2007 01:08:49	09/11/2007 02:44:26	5737	N	*n/k*	*n/k*	*n/k*	*n/k*
18/11/2007 22:59:06	19/11/2007 00:38:56	5990	N	*n/k*	*n/k*	*n/k*	*n/k*
03/12/2007 21:59:58	05/12/2007 08:10:00	123002	Y	On-board	Platform OCM & maintenance	RAL Status	AATSR was commanded into STANDBY mode during an ENVISAT memory maintenance activity.
05/12/2007 08:10:00	06/12/2007 09:06:44	89804	N	On-board	AATSR anomaly	RAL Status	On restart after the above activity, the instrument went into STANDBY/REFUSE mode at 08:10 on 05-Dec-2007.
11/12/2007 11:28:59	11/12/2007 13:10:52	6113	N	*n/k*	*n/k*	*n/k*	*n/k*
13/12/2007 06:43:59	14/12/2007 08:16:56	91977	Y	On-board	Platform memory maintenance	U/A list	Memory Maintenance. Ref. AR ENV-1059 & ENVI-OpsReq-500/2007.

Gap start	Gap end	Duration (s)	Planned	Origin	Reason	Reference	Details
16/12/2007 01:30:49	16/12/2007 06:05:21	16472	N	*n/k*	*n/k*	*n/k*	*n/k*
28/12/2007 03:05:36	28/12/2007 04:47:08	6092	N	Artemis	Platform anomaly	U/A list	ARTEMIS triggered a spurious platform anomaly which disconnected the APC from the bus
28/12/2007 23:43:49	29/12/2007 04:16:36	16367	N	*n/k*	*n/k*	*n/k*	*n/k*

Table 13. Level 0 gaps for 2008

Gap start	Gap end	Duration (s)	Planned	Origin	Reason	Reference	Details
16/01/2008 16:11:10	17/01/2008 13:44:50	77620	N	On-board	HSM anomaly	U/A list	Due to an HSM anomaly no Low Rate Data is being transmitted.; HSM reset required
07/02/2008 02:03:17	07/02/2008 03:22:37	4760	N	Artemis	Platform anomaly	U/A list	ARTEMIS triggered a spurious platform anomaly Level2B, which disconnected the APC from the bus. Service affected: SR_22871 (complete loss).Sub-System: AOCS, APC
07/02/2008 12:49:38	07/02/2008 14:27:03	5845	N	Artemis	Platform anomaly	U/A list	ARTEMIS triggered a spurious platform anomaly Level1A/B, which disconnected the APC from the bus. Service affected: None. Sub-System: AOCS, APC .
11/02/2008 23:45:04	12/02/2008 09:10:00	33896	Y	On-board	Platform OCM	RAL Status	Planned OCM
15/02/2008 06:57:21	15/02/2008 08:38:23	6062	N	Artemis	Uplink problem	U/A list	No RT DATA on Cortex 3 received. Testdata were OK. Swap TLM to cortex4 and request uplink from cortex4. At 08:41:00 uplink successfully configured
04/03/2008 23:36:56	05/03/2008 01:16:29	5973	N	Artemis	Incorrect command	U/A list	Artemis UA Report 2008/011 The ENV service SR_23314 didn't start at scheduled time due to a wrong Time Tag command generated by the scheduler (AOCC ground segment).
28/03/2008 04:59:03	28/03/2008 06:34:42	5739	N	*n/k*	*n/k*	*n/k*	*n/k*
28/03/2008 21:31:22	28/03/2008 23:15:04	6222	N	*n/k*	*n/k*	*n/k*	*n/k*

Gap start	Gap end	Duration (s)	Planned	Origin	Reason	Reference	Details
01/04/2008 04:32:28	01/04/2008 06:09:57	5849	N	Ground segment	Svalbard GS	Daily report	Reception problem at SVA over weekend due to power failure (from Daily Report)
09/04/2008 01:16:26	09/04/2008 04:10:54	10468	N	Artemis	None given	U/A list	Report 2008/015 Service affected: SR_23398, 23399 (complete loss), SR_23400 (9 minutes lost) ENVISAT stopped transmitting while the service end was foreseen at 02:00:00z.
16/04/2008 22:45:33	17/04/2008 00:24:58	5965	N	Artemis	Commands not loaded	U/A list	SR_23535 didn't execute because the time tagged commands were not loaded on board Artemis. Ref.: Artemis/Envisat Unav. Rep. 2008/016
20/04/2008 14:33:36	20/04/2008 16:08:20	5684	N	Ground segment	Kiruna GS	U/A list	15m Antenna did not move, 13m Antenna TM ok , but no Uplink (HPA did not work)
21/04/2008 22:04:59	22/04/2008 07:15:00	33001	Y	On-board	Platform OCM	RAL Status	Planned OCM
29/04/2008 05:23:08	29/04/2008 07:03:45	6037	N	Artemis	IU anomaly	U/A list	UA Report 2008/018. Service affected: SR_23737 (complete loss) SR_23738 (5 minutes lost) ARTEMIS triggered a spurious intelligent users anomaly, which disconnected the APC from the bus.
30/06/2008 22:05:01	01/07/2008 07:23:07	33486	Y	On-board	Platform OCM	RAL Status	Planned OCM
08/09/2008 22:05:57	09/09/2008 06:59:58	32041	Y	On-board	Platform OCM	RAL Status	Planned OCM
11/09/2008 20:40:56	12/09/2008 01:14:25	16409	N	Artemis	ATV emergency request	U/A list	SR_24944, SR_25945 & SR_24946 have been deleted following an ATV emergency request.(ATV debris Avoidance manoeuvre and also an TDRS support emergency situation due to IKE hurricane over US south)
17/09/2008 22:05:12	17/09/2008 23:44:19	5947	N	Artemis	IU anomaly	U/A list	UA Report 2008/028, Service affected: SR_26047, Sub-System: APC. ARTEMIS triggered a spurious "Intelligent Users" anomaly, which disconnected the APC from the bus"
17/11/2008 22:04:56	18/11/2008 06:59:57	32101	Y	On-board	Platform OCM	RAL Status	Planned OCM
30/11/2008 04:25:09	30/11/2008 06:05:40	6031	N	Ground segment	ESRIN GS	Daily report	Acquisition failure at PDHS-E due to Artemis antenna

Gap start	Gap end	Duration (s)	Planned	Origin	Reason	Reference	Details
30/11/2008 20:27:55	01/12/2008 07:14:39	38804	N	Ground segment	ESRIN GS	Daily report	Acquisition failure at PDHS-E due to Artemis antenna
13/12/2008 15:23:06	13/12/2008 16:59:43	5797	N	Ground segment	Kiruna GS	U/A list	NO TM at AOS. Network informed and confirm that antenna did not move. KIR GS notified and antenna will be looked at
28/12/2008 04:45:53	28/12/2008 06:25:53	6000	N	*n/k*	*n/k*	*n/k*	*n/k*
30/12/2008 22:37:55	31/12/2008 00:17:13	5958	N	*n/k*	*n/k*	*n/k*	*n/k*

Table 14. Level 0 gaps for 2009

Gap start	Gap end	Duration (s)	Planned	Origin	Reason	Reference	Details
26/01/2009 23:44:56	27/01/2009 06:49:56	25500	Y	On-board	Platform OCM	RAL Status	Planned OCM
07/02/2009 22:10:35	08/02/2009 01:30:48	12013	N	Artemis	AOCS,APC anomaly	U/A list	UA Report 2009/001 Service affected: SR_28412, 28413, 28415, 28416 (complete loss) SR_28414 (8 min lost) Sub-System: AOCS, APC
08/02/2009 02:48:48	08/02/2009 06:05:13	11785	N	Artemis	AOCS,APC anomaly		
16/03/2009 05:35:05	16/03/2009 07:14:05	5940	N	Artemis	Incomplete patch	U/A list	Service has failed due to an incomplete patch loaded on board ARTEMIS. SR29011. ARTEMIS / ENVISAT UA Report 2009/003
06/04/2009 23:44:56	07/04/2009 06:49:56	25500	Y	On-board	Platform OCM	RAL Status	Planned OCM
28/04/2009 13:03:53	29/04/2009 11:56:50	82377	N	On-board	HSM anomaly	U/A list	(PEB HSM & ESU) HSM reset. Ref.: AR ENV_SC-1065
04/05/2009 11:03:17	04/05/2009 12:42:10	5933	N	Ground segment	Kiruna GS	U/A list	Late AOS due to servo problem with 13m antenna
21/06/2009 04:46:06	21/06/2009 06:25:34	5968	N	*n/k*	*n/k*	*n/k*	*n/k*
20/07/2009 22:07:00	21/07/2009 06:55:00	31680	Y	On-board	Platform OCM	RAL Status	Planned OCM
27/07/2009 13:43:12	27/07/2009 15:20:02	5810	N	Ground segment	Kiruna GS	U/A list	Pass lost - 13m antenna not moving.

Gap start	Gap end	Duration (s)	Planned	Origin	Reason	Reference	Details
20/08/2009 00:27:14	20/08/2009 02:03:18	5764	N	Artemis	Service failure	U/A list	Art/Env UA Rep 2009/005 SR_31622 (complete loss). Complete Service failed during Moon eclipse operation. (Artemis AOC mode has been changed.)
24/08/2009 04:33:46	24/08/2009 06:14:22	6036	N	Artemis	APC anomaly	U/A list	ARTEMIS / ENVISAT U/ R 2009/006. Service affected: SR_31694 (complete loss). Sub-System APC. The service has failed due to TC sequence corrupted
15/09/2009 21:22:00	15/09/2009 22:48:01	5161	N	*n/k*	*n/k*	*n/k*	*n/k*
28/09/2009 22:07:53	29/09/2009 06:59:54	31921	Y	On-board	Platform OCM	RAL Status	Planned OCM
30/09/2009 03:29:19	30/09/2009 05:10:49	6090	N	Artemis	APC anomaly	U/A list	Artemis UA Report 2009/007: Service affected: SR_32329, ,Sub-System: APC
08/10/2009 03:16:05	08/10/2009 17:04:52	49727	N	On-board	AATSR anomaly	RAL Status	03:15 Envisat PMC switched AATSR into WAIT following two or more TM format errors.
13/10/2009 11:10:59	13/10/2009 12:50:40	5981	N	*n/k*	*n/k*	*n/k*	*n/k*
27/10/2009 20:22:20	28/10/2009 07:11:36	38956	N	Artemis	Platform anomaly	U/A list	ARTEMIS triggered a platform anomaly Level3, which switched OFF the SKDR payload
09/11/2009 02:36:41	09/11/2009 05:53:23	11802	N	Ground segment	ESRIN GS	Daily report	Acquisition failure at ESRIN due to a thunderstorm
25/11/2009 20:11:22	26/11/2009 07:00:27	38945	N	Ground segment	ESRIN GS	Daily report	Acquisition failure at ESRIN
07/12/2009 22:04:51	08/12/2009 06:59:52	32101	Y	On-board	Platform OCM	RAL Status	Planned OCM

Table 15. Level 0 gaps for 2010

Gap start	Gap end	Duration (s)	Planned	Origin	Reason	Reference	Details
15/01/2010 03:04:04	15/01/2010 04:11:33	4049	N	*n/k*	*n/k*	*n/k*	*n/k*
22/01/2010 02:34:50	22/01/2010 03:51:17	4587	N	*n/k*	*n/k*	*n/k*	*n/k*

Gap start	Gap end	Duration (s)	Planned	Origin	Reason	Reference	Details
02/02/2010 01:47:26	02/02/2010 06:23:25	16559	N	Artemis	Platform anomaly	U/A list	ARTEMIS triggered a spurious platform anomaly Level2A, which disc. the APC from the bus. Service affected: SR_34357, 34358, 34359 Ref: Report 2010/002
06/02/2010 21:52:51	07/02/2010 07:05:17	33146	N	Artemis	Platform anomaly	U/A list	ARTEMIS triggered a platform anomaly Level3, which switched OFF the SKDR payload. Service affected: SR_34430 to SR_34439"
15/02/2010 22:04:51	16/02/2010 06:59:52	32101	Y	On-board	Platform OCM	RAL Status	Planned OCM
24/02/2010 15:19:09	24/02/2010 15:53:21	2052	N	n/k	n/k	n/k	n/k
11/04/2010 01:11:43	11/04/2010 07:28:13	22590	N	Artemis	USV-2 support	Daily report	Envisat services affected by USV-2 launch on 11/04/2010
26/04/2010 22:08:14	27/04/2010 06:59:51	31897	Y	On-board	Platform OCM	RAL Status	Planned OCM
17/06/2010 10:10:38	17/06/2010 11:48:07	5849	N	Ground segment	Kiruna GS	WR 414	On 17th June one Orbit was not recorded due to an equipment failure at Kiruna station
24/06/2010 09:50:27	24/06/2010 11:28:23	5876	N	Ground segment	Kiruna GS	U/A list	Late AOS due to antenna configuration problems (9 mins of TM and 8 mins of TC lost)
05/07/2010 23:53:50	06/07/2010 06:59:50	25560	Y	On-board	Platform OCM	RAL Status	Planned OCM
08/07/2010 12:29:06	08/07/2010 14:07:01	5875	N	Ground segment	Kiruna GS	U/A list	On 08th July X-Band data lost due to issues affecting Kiruna acquisition node 2 equipment (Ref: WR 416)
09/07/2010 06:57:18	09/07/2010 08:38:44	6086	N	Ground segment	Kiruna GS	U/A list	Partial TM (6 minutes), no TC. M&C crash requiring manual intervention.
01/08/2010 19:32:23	02/08/2010 07:11:36	41953	N	n/k	n/k	n/k	n/k
03/08/2010 08:25:33	03/08/2010 10:01:10	5737	N	n/k	n/k	n/k	n/k
07/08/2010 07:59:41	07/08/2010 09:35:18	5737	N	n/k	n/k	n/k	n/k
10/08/2010 23:10:50	11/08/2010 00:46:27	5737	N	n/k	n/k	n/k	n/k

Gap start	Gap end	Duration (s)	Planned	Origin	Reason	Reference	Details
24/08/2010 14:30:25	24/08/2010 16:04:44	5659	N	Ground segment	Kiruna GS	U/A list	Late AOS due to 13 m ANTENNA stuck, 15 m ANTENNA occupied by CRYOSAT. After CRYOSAT PASS finished 15 m Antenna configured for ENVISAT.6 Minutes of Telemetry lost.
30/08/2010 17:55:23	30/08/2010 19:34:16	5933	N	*n/k*	*n/k*	*n/k*	*n/k*
31/08/2010 04:43:31	31/08/2010 06:22:25	5934	N	*n/k*	*n/k*	*n/k*	*n/k*
02/09/2010 17:46:03	02/09/2010 19:21:39	5736	N	*n/k*	*n/k*	*n/k*	*n/k*
12/09/2010 00:45:39	12/09/2010 02:21:16	5737	N	*n/k*	*n/k*	*n/k*	*n/k*
25/09/2010 09:00:00	25/09/2010 12:16:13	11773	N	*n/k*	*n/k*	*n/k*	*n/k*
26/09/2010 06:47:47	26/09/2010 10:04:00	11773	N	*n/k*	*n/k*	*n/k*	*n/k*
21/10/2010 00:06:54	21/10/2010 06:20:25	22411	Y	On-board	Envisat 2010+	U/A list	Envisat 2010+
21/10/2010 20:39:27	21/10/2010 23:30:55	10288	Y	On-board	Envisat 2010+	U/A list	Envisat 2010+
21/10/2010 23:53:43	22/10/2010 08:37:01	31398	Y	On-board	E2010+ execution of first OCM burns	U/A list	E2010+ preparation for & execution of first OCM burns
22/10/2010 12:04:34	22/10/2010 13:42:05	5851	Y	On-board	Envisat 2010+	U/A list	Envisat 2010+
22/10/2010 13:42:07	22/10/2010 15:16:04	5637	Y	On-board	Envisat 2010+	U/A list	Envisat 2010+
22/10/2010 20:16:50	23/10/2010 08:04:14	42444	Y	On-board	Envisat 2010+	U/A list	Envisat 2010+
23/10/2010 11:18:17	23/10/2010 22:21:55	39818	Y	On-board	Envisat 2010+	U/A list	Envisat 2010+
23/10/2010 22:47:49	27/10/2010 18:50:40	331371	Y	On-board	Envisat 2010+ main OCM	U/A list	Envisat 2010+ main manoeuvre
30/10/2010 08:28:11	30/10/2010 18:24:36	35785	Y	On-board	Envisat 2010+	U/A list	Envisat 2010+
30/10/2010 23:17:32	31/10/2010 00:55:25	5873	Y	On-board	Envisat 2010+	U/A list	Envisat 2010+
31/10/2010 14:53:46	31/10/2010 16:07:40	4434	Y	On-board	Envisat 2010+	U/A list	Envisat 2010+
31/10/2010 19:33:08	31/10/2010 19:46:50	822	Y	On-board	Envisat 2010+	U/A list	Envisat 2010+
01/11/2010 02:14:04	01/11/2010 03:49:19	5715	Y	On-board	Envisat 2010+	U/A list	Envisat 2010+
02/11/2010 11:38:47	02/11/2010 13:14:02	5715	Y	On-board	Envisat 2010+	U/A list	Envisat 2010+

Gap start	Gap end	Duration (s)	Planned	Origin	Reason	Reference	Details
02/11/2010 15:19:20	02/11/2010 16:58:39	5959	N	Ground segment	Kiruna GS	WR 432	Data on 02nd November lost due to antenna problems
16/11/2010 04:34:11	16/11/2010 05:43:26	4155	N	Ground segment	ESRIN GS	WR 434	Data on 16th November lost due to bad weather conditions
20/11/2010 06:37:14	20/11/2010 07:42:14	3900	N	n/k	n/k	n/k	n/k
21/11/2010 12:08:11	21/11/2010 13:44:49	5798	N	n/k	n/k	n/k	n/k
21/11/2010 15:03:11	21/11/2010 15:21:01	1070	N	n/k	n/k	n/k	n/k
23/11/2010 23:51:07	24/11/2010 04:46:51	17744	N	n/k	n/k	n/k	n/k
25/11/2010 05:32:19	25/11/2010 06:53:56	4897	N	Ground segment	ESRIN GS	WR 435	Data on 25th November missing due to bad weather and birds resting on the antenna feeder.
30/11/2010 00:57:48	30/11/2010 03:46:33	10125	N	n/k	n/k	n/k	n/k
02/12/2010 21:27:17	02/12/2010 23:06:23	5946	N	Artemis	IU anomaly	U/A list	ARTEMIS triggered a spurious "Intelligent Users" anomaly, which disconnected the APC from the bus. SR affected: 38479 / 38480 ART/ENV UNA 2010/011.
05/12/2010 01:21:39	05/12/2010 02:16:23	3284	N	Ground segment	Kiruna GS	WR 436	Data on 5th December is missing because of Antenna anomaly (instability of the satellite signal tracking)
14/12/2010 16:57:00	14/12/2010 19:31:53	9293	N	Ground segment	Kiruna GS	U/A list	14/12/2010 17:52:00 14/12/2010 18:05:00 Pass lost due to problems with KIR2 Antenna.
19/12/2010 05:34:54	19/12/2010 07:15:17	6023	N	n/k	n/k	n/k	n/k
25/12/2010 00:42:52	25/12/2010 00:50:26	454	N	n/k	n/k	n/k	n/k
25/12/2010 02:35:39	25/12/2010 03:32:24	3405	N	n/k	n/k	n/k	n/k
26/12/2010 23:28:26	27/12/2010 00:59:57	5491	N	n/k	n/k	n/k	n/k

Table 16. Level 0 gaps for 2011

Gap start	Gap end	Duration (s)	Planned	Origin	Reason	Reference	Details
04/01/2011 15:11:28	04/01/2011 16:47:45	5777	N	*n/k*	*n/k*	*n/k*	*n/k*
05/01/2011 11:18:15	05/01/2011 12:56:33	5898	N	*n/k*	*n/k*	*n/k*	*n/k*
05/01/2011 14:37:12	05/01/2011 16:11:46	5674	N	*n/k*	*n/k*	*n/k*	*n/k*
12/01/2011 20:11:43	12/01/2011 23:04:30	10367	N	Artemis	Platform anomaly	U/A list	ARTEMIS triggered a spurious platform anomaly Level2A, which disconnected the APC from the bus. The following services have been reloaded without BIAS: SR_39033, 39034, 39035, 39036"
13/01/2011 11:27:09	13/01/2011 13:02:46	5737	N	*n/k*	*n/k*	*n/k*	*n/k*
08/02/2011 23:16:12	09/02/2011 00:56:45	6033	N	*n/k*	*n/k*	*n/k*	*n/k*
16/02/2011 21:41:27	16/02/2011 23:23:29	6122	N	Artemis	ATV support	U/A list	Art UA Report 2011/006 Service affected: SR_39515 deleted by AMCF following ATV LEOP mission phase 11H, requiring ARTEMIS support for TM/TC
20/02/2011 22:36:44	21/02/2011 06:29:19	28355	N	Artemis	Platform anomaly	U/A list	Art UA Report 2011/009 ARTEMIS triggered a platform anomaly Level3, which switched OFF the SKDR payload.
23/02/2011 03:33:58	23/02/2011 06:55:42	12104	N	Ground segment	ESRIN GS	WR 447	On 23rd February data was not acquired due to the Envisat service rejection on the prime machine AMCF1. The service range was not identical as planned with the one on the off-line machine
15/03/2011 20:26:32	15/03/2011 22:01:46	5714	N	*n/k*	*n/k*	*n/k*	*n/k*
22/03/2011 02:22:01	22/03/2011 07:06:27	17066	N	Artemis	ATV support	WR 451	On 22nd March, the data were not transmitted by Artemis to ESRIN because Artemis was being used for ATV-2 (Ref WR 451), no U/A rept
25/03/2011 00:43:50	25/03/2011 01:04:06	1216	N	*n/k*	*n/k*	*n/k*	*n/k*
26/03/2011 00:06:33	26/03/2011 01:43:18	5805	N	*n/k*	*n/k*	*n/k*	*n/k*

Gap start	Gap end	Duration (s)	Planned	Origin	Reason	Reference	Details
26/03/2011 23:31:21	27/03/2011 01:09:47	5906	N	Artemis	APC table incomplete	U/A list	Art/Env UA Report 2011/014. service has failed due to an incomplete APC table loaded on board ARTEMIS. Service affected:SR_40070.
28/03/2011 07:54:40	28/03/2011 09:35:26	6046	N	Ground segment	Kiruna GS	WR 452	Due to a misconfiguration of the Kiruna Ground Station a pass was lost on 28th March. The GSS file was containing some errors which were caused by a known bug with regard to the Ranging Calibration activity
29/03/2011 20:28:27	29/03/2011 23:20:33	10326	N	Ground segment	ESRIN GS	WR 452	ESRIN GS: Service rejected due to prime mismatch with off-line plan on AMCF
03/04/2011 15:50:34	04/04/2011 13:50:01	79167	N	On-board	SM anomaly	U/A list	Payload switch-off due to Service Module Anomaly. SM DSL caused by illegal IT 1 CCU Register access. Ref.: AR ENV_SC-5038.
04/04/2011 13:50:01	06/04/2011 15:41:35	179494	Y	On-board	AATSR outgassing	U/A list	AATSR infrared channels unavailable during outgassing, following on from above anomaly
09/04/2011 02:44:45	09/04/2011 03:22:56	2291	N	*n/k*	*n/k*	*n/k*	*n/k*
09/04/2011 05:08:10	09/04/2011 06:06:44	3514	N	*n/k*	*n/k*	*n/k*	*n/k*
20/04/2011 15:27:02	20/04/2011 17:03:14	5772	N	*n/k*	*n/k*	*n/k*	*n/k*
25/04/2011 18:59:44	25/04/2011 20:38:02	5898	N	*n/k*	*n/k*	*n/k*	*n/k*
25/04/2011 21:48:57	25/04/2011 21:59:09	612	N	*n/k*	*n/k*	*n/k*	*n/k*
25/04/2011 23:44:22	26/04/2011 01:10:19	5157	N	*n/k*	*n/k*	*n/k*	*n/k*
26/04/2011 11:52:15	26/04/2011 13:30:09	5874	N	*n/k*	*n/k*	*n/k*	*n/k*
26/04/2011 13:59:21	26/04/2011 18:01:57	14556	N	On-board	HSM anomaly	U/A list	No AATSR NRT data after orbit 47869 due to electronics malfunction on platform. 28/04/2011 09:51:00 28/04/2011 09:53:00 HSM Input Reset (Input 1 AATSR, MIPAS) Some recovery undergone after the event

Gap start	Gap end	Duration (s)	Planned	Origin	Reason	Reference	Details
26/04/2011 20:02:39	27/04/2011 06:46:22	38623	N	On-board	**HSM anomaly/Retrieved data**	U/A list	**Kiruna NRT retrieved and consolidated; ESRIN NRT retrieved but not consolidated**
27/04/2011 21:05:35	28/04/2011 06:11:09	32734	N	On-board	**HSM anomaly/Retrieved data**	U/A list	**Kiruna NRT retrieved and consolidated; ESRIN NRT retrieved but not consolidated**
30/04/2011 03:15:19	30/04/2011 04:57:24	6125	N	*n/k*	*n/k*	*n/k*	*n/k*
09/05/2011 01:48:12	09/05/2011 05:03:41	11729	N	*n/k*	*n/k*	*n/k*	*n/k*
09/05/2011 05:38:05	09/05/2011 07:11:21	5596	N	*n/k*	*n/k*	*n/k*	*n/k*
21/05/2011 16:29:01	21/05/2011 18:05:48	5807	N	*n/k*	*n/k*	*n/k*	*n/k*
22/05/2011 20:34:22	22/05/2011 23:49:51	11729	N	*n/k*	*n/k*	*n/k*	*n/k*
23/05/2011 20:10:44	23/05/2011 23:02:08	10284	N	Artemis	ATV support	U/A list	UA Report 2011/017: SR_40945, SR_40946 and SR_40947 have been deleted/modified by AMCF following ATV Emergency request, requiring ARTEMIS support for TM/TC due to Docking active phase.
02/06/2011 04:47:34	02/06/2011 06:26:50	5956	N	Artemis	Platform anomaly	U/A list	SR_41087 (partially), SR_41088, SR_41089 and SR_41090 have failed since ARTEMIS triggered a platform anomaly Level3, which switched OFF the SKDR payload.
02/06/2011 20:45:44	03/06/2011 01:15:15	16171	N	Artemis	Service failed	U/A list	Service has failed due to the harmonic bias compensation not configured for this service following the previous recovery for Level3 anomaly.SR 41096 to 41101 failed. Ref.: Report 2011/020 Is2
03/06/2011 04:11:25	03/06/2011 05:50:59	5974	N	Artemis	Service failed		
08/06/2011 02:46:21	08/06/2011 06:07:46	12085	N	Artemis	Platform anomaly	U/A list	ARTEMIS triggered a spurious platform anomaly Level2A, which disconnected the APC from the bus. Affected SRID_41175, SRID_41176. Ref: ART-ENV-UNA-2011-021.
16/06/2011 01:39:39	16/06/2011 02:52:07	4348	N	Artemis	APC stopped	U/A list	ARTEMIS triggered to APC stopped mode. The APC has been reset and put back operative
17/07/2011 10:07:36	17/07/2011 11:15:35	4079	N	*n/k*	*n/k*	*n/k*	*n/k*

Gap start	Gap end	Duration (s)	Planned	Origin	Reason	Reference	Details
17/07/2011 18:01:31	17/07/2011 18:16:17	886	N	*n/k*	*n/k*	*n/k*	*n/k*
12/08/2011 17:08:24	12/08/2011 18:43:38	5714	N	*n/k*	*n/k*	*n/k*	*n/k*
19/08/2011 13:16:10	19/08/2011 14:53:12	5822	N	*n/k*	*n/k*	*n/k*	*n/k*
19/08/2011 17:51:56	19/08/2011 18:06:45	889	N	*n/k*	*n/k*	*n/k*	*n/k*
20/08/2011 14:17:46	20/08/2011 15:53:57	5771	N	*n/k*	*n/k*	*n/k*	*n/k*
20/08/2011 20:35:39	20/08/2011 20:49:23	824	N	*n/k*	*n/k*	*n/k*	*n/k*
20/08/2011 23:43:02	21/08/2011 01:20:54	5872	N	*n/k*	*n/k*	*n/k*	*n/k*
22/08/2011 02:23:22	22/08/2011 03:37:31	4449	N	*n/k*	*n/k*	*n/k*	*n/k*
20/09/2011 10:24:57	20/09/2011 13:05:52	9655	N	Ground segment	Kiruna GS	WR 477	Received degraded ESRANGE X-band data due to antenna issues on 20th & 21st September. ESRANGE X-band passes were taken during Kiruna power outage
21/09/2011 09:51:00	21/09/2011 11:26:37	5737	N	Ground segment	Kiruna GS		
22/09/2011 06:28:56	22/09/2011 09:07:02	9486	N	Ground segment	Kiruna GS		
22/09/2011 09:13:53	22/09/2011 10:46:14	5541	N	Ground segment	Kiruna GS		
22/09/2011 10:52:46	22/09/2011 12:26:36	5630	N	Ground segment	Kiruna GS		
22/09/2011 12:28:07	22/09/2011 14:03:33	5726	N	Ground segment	Kiruna GS		
22/09/2011 14:03:43	22/09/2011 15:43:34	5991	N	Ground segment	Kiruna GS		
22/09/2011 15:45:04	22/09/2011 17:23:04	5880	N	Ground segment	Kiruna GS		
22/09/2011 17:24:35	22/09/2011 19:02:44	5889	N	Ground segment	Kiruna GS		
22/09/2011 19:03:11	22/09/2011 20:36:29	5598	N	Ground segment	Kiruna GS		
29/09/2011 13:12:15	29/09/2011 14:46:41	5666	N	Ground segment	Kiruna GS	U/A list	Kiruna GS: Issue at ground station meant the scheduler was not running, Network and Kiruna tried to correct but were unable to do so in the pass.
11/10/2011 07:34:31	11/10/2011 09:14:07	5976	N	*n/k*	*n/k*	*n/k*	*n/k*
11/10/2011 17:25:35	11/10/2011 19:03:18	5863	N	*n/k*	*n/k*	*n/k*	*n/k*
13/10/2011 13:23:39	13/10/2011 14:32:55	4156	N	Ground segment	Kiruna GS	U/A list	Intermittent TM at AOS, eventual full loss of TM and pass at 14.36.

Gap start	Gap end	Duration (s)	Planned	Origin	Reason	Reference	Details
14/10/2011 01:14:57	14/10/2011 05:59:58	17101	Y	On-board	Platform OCM	RAL Status	Planned OCM
21/10/2011 09:46:27	21/10/2011 11:24:30	5883	N	Ground segment	Kiruna GS	U/A list	Envisat Pass with orbit #50425 Completely Lost Due to KI2 Antenna complete Failure
26/10/2011 07:16:55	26/10/2011 08:22:32	3937	N	n/k	n/k	n/k	n/k
12/12/2011 03:51:23	12/12/2011 05:12:36	4873	N	n/k	n/k	n/k	n/k
20/12/2011 21:03:23	21/12/2011 00:18:52	11729	N	n/k	n/k	n/k	n/k

Table 17. Level 0 gaps for 2012

Gap start	Gap end	Duration (s)	Planned	Origin	Reason	Reference	Details
23/01/2012 07:19:56	24/01/2012 08:35:15	90919	Y	On-board	SM memory fault	U/A list	An ongoing (since 16 Jan) Service Module Memory Fault required PL switch off (Ref.: AR ENV_SC-5049)
24/01/2012 08:35:15	26/01/2012 13:52:07	191812	Y	On-board	AATSR outgassing	U/A list	Planned outgassing to take advantage of downtime from above SM fault
03/02/2012 01:36:02	03/02/2012 04:29:45	10423	N	Ground segment	ESRIN GS	Daily report	Antenna problems at ESRIN (due to heavy snow)
04/02/2012 03:49:50	04/02/2012 07:12:25	12155	N	Ground segment	ESRIN GS	Daily report	Antenna problems at ESRIN (due to heavy snow)
29/02/2012 22:21:04	01/03/2012 06:00:00	27536	Y	On-board	Platform OCM maintenance	RAL Status	Planned OCM
04/03/2012 18:49:19	04/03/2012 20:27:36	5897	N	Ground segment	Kiruna GS	U/A list	Late AOS due to CSMC software issues. 8 Minutes of Telemetry lost.

B.1 Acronyms and abbreviations used in the L0 gap tables

A listing of the acronyms and abbreviations used in the L0 gap tables is given in Table 18.

Table 18. Acronyms and abbreviations used in the L0 gap tables

Abbreviation	Meaning
ACU	Antenna Control Unit
AMCF	Artemis Mission Control Facility
ANT	Antenna
AOCC	Artemis Operations Control Centre
AOCS	Attitude and Orbit Control System
AOS	Acquisition Of Signal
APC	Antenna Pointing Controller
CCU	Central Communication Unit
CSMC	Central Station Monitoring & Control
DOY	Day of Year
DSL	Digital Subscriber Line
ESU	Encoding and Switching Unit
FEC	Front End Controller
HPA	High Power Amplifier
HR	High Rate
HSM	High Speed Multiplexer
IU	Intelligent users
KIR	Kiruna
LEOP	Launch and Early Orbit Phase
LR	Low Rate
M&C	Monitoring and Control
MPS	Mission Planning System
O/G	Outgassing
PEB	Payload Equipment Bay
PL	Payload
PMC	Payload Module Computer
RS/WT/INI	(A particular mode for MWR, RA2 and DORIS)
RT	Real Time
RxD	Received
SKDR	S/Ka-band Data Relay
SM	Service Module
SOL	Switch-Off Line

SR	Service Request
STC	[Ground] Station Computer
STD	Digital Earth Sensor
STDM	Spacecraft Trajectory Data Message
SVA	Svalbard
SW	Software
TC	Telecommand
TDRS	Tracking and Data Relay Satellite
TLM	Telemetry
TM	Telemetry
TT	Time-Tagged
WR	Weekly Report
XDC	X-band Down Conversion

APPENDIX C   LISTS OF L0 DATA TO BE REMOVED FROM THE LRAC DATABASE

This appendix contains lists of L0 products that should be removed (or quarantined) from the LRAC L0 database in order to obtain a cleaned L0 database, i.e. one that does not include any duplicate information.

C.1   List of duplicate AATSR L0 products (567 products)

Table 19 lists the duplicate products that IDEAS have identified in the LRAC L0 database. It is recommended that these be set aside from the L0 database.

Table 19. Duplicate L0 products

Product name (Duplicate L0)
ATS_NL__0PPLRA20020525_003215_000063352006_00159_01215_0106.N1
ATS_NL__0PPLRA20020531_004343_000063352006_00245_01301_0196.N1
ATS_NL__0PPLRA20020531_022419_000063352006_00246_01302_0197.N1
ATS_NL__0PPLRA20020531_040455_000063352006_00247_01303_0198.N1
ATS_NL__0PPLRA20020531_054531_000063352006_00248_01304_0199.N1
ATS_NL__0PPLRA20020531_072607_000063352006_00249_01305_0200.N1
ATS_NL__0PPLRA20020531_090643_000063352006_00250_01306_0201.N1
ATS_NL__0PPLRA20020531_104718_000063352006_00251_01307_0202.N1
ATS_NL__0PPLRA20020531_122754_000063352006_00252_01308_0203.N1
ATS_NL__0PPLRA20020531_140830_000063352006_00253_01309_0204.N1
ATS_NL__0PPLRA20020531_154906_000063352006_00254_01310_0205.N1
ATS_NL__0PPLRA20020531_172942_000063352006_00255_01311_0206.N1
ATS_NL__0PPLRA20020531_191018_000063352006_00256_01312_0207.N1
ATS_NL__0PPLRA20020601_001206_000063352006_00259_01315_0210.N1
ATS_NL__0PPLRA20020601_015241_000063352006_00260_01316_0211.N1
ATS_NL__0PPLRA20020601_033317_000063352006_00261_01317_0212.N1
ATS_NL__0PPLRA20020601_051353_000063352006_00262_01318_0213.N1
ATS_NL__0PPLRA20020601_065429_000063352006_00263_01319_0214.N1
ATS_NL__0PPLRA20020601_083505_000063352006_00264_01320_0215.N1
ATS_NL__0PPLRA20020601_101541_000063352006_00265_01321_0216.N1
ATS_NL__0PPLRA20020601_115617_000063352006_00266_01322_0217.N1
ATS_NL__0PPLRA20020612_161210_000063362006_00426_01482_0400.N1
ATS_NL__0PPLRA20020612_161210_000063362006_00426_01482_0468.N1
ATS_NL__0PPLRA20020614_215120_000063352006_00458_01514_0432.N1
ATS_NL__0PPLRA20020626_235456_000063352007_00130_01687_0660.N1
ATS_NL__0PPLRA20020703_000624_000063352007_00216_01773_0747.N1
ATS_NL__0PPLRA20020713_213950_000010112007_00372_01929_0950.N1
ATS_NL__0PPLRA20020714_052039_000028302007_00377_01934_0954.N1

Product name (Duplicate L0)
ATS_NL__0PPLRA20020714_060249_000063352007_00377_01934_0955.N1
ATS_NL__0PPLRA20020714_074325_000063352007_00378_01935_0956.N1
ATS_NL__0PPLRA20020714_074325_000063352007_00378_01935_1017.N1
ATS_NL__0PPLRA20020714_160625_000063362007_00383_01940_1022.N1
ATS_NL__0PPLRA20020714_174701_000063352007_00384_01941_0962.N1
ATS_NL__0PPLRA20020714_192737_000063352007_00385_01942_0963.N1
ATS_NL__0PPLRA20020714_210813_000063352007_00386_01943_0964.N1
ATS_NL__0PPLRA20020714_224849_000063352007_00387_01944_0965.N1
ATS_NL__0PPLRA20020722_151441_000063362007_00497_02054_2507.N1
ATS_NL__0PPLRA20020722_165517_000063362007_00498_02055_2508.N1
ATS_NL__0PPLRA20020722_183553_000063352007_00499_02056_2509.N1
ATS_NL__0PPLRA20020722_201629_000063352007_00500_02057_2510.N1
ATS_NL__0PPLRA20020722_215705_000063352008_00501_02058_2511.N1
ATS_NL__0PPLRA20020923_235745_000063352009_00402_02961_3488.N1
ATS_NL__0PPLRA20021129_002337_000063352011_00345_03906_4526.N1
ATS_NL__0PPLRA20021202_221710_000063352011_00401_03962_4582.N1
ATS_NL__0PPLRA20021202_235746_000063352011_00402_03963_4583.N1
ATS_NL__0PPLRA20021204_010645_000063342011_00417_03978_4624.N1
ATS_NL__0PPLRA20021204_024720_000063352011_00418_03979_4625.N1
ATS_NL__0PPLRA20021208_004052_000063352011_00474_04035_4681.N1
ATS_NL__0PPLRA20021209_000915_000063352011_00488_04049_4682.N1
ATS_NL__0PPLRA20030108_225430_000063352012_00430_04492_5157.N1
ATS_NL__0PPLRA20030109_003506_000063352012_00431_04493_5158.N1
ATS_NL__0PPLRA20030205_231437_000063352013_00330_04893_5565.N1
ATS_NL__0PPLRA20030330_002046_000063352015_00073_05638_6568.N1
ATS_NL__0PPLRA20030830_015255_000063352019_00260_07829_9096.N1
ATS_NL__0PPLRA20030922_231741_000063352020_00101_08171_9530.N1
ATS_NL__0PPLRA20031004_001216_000063352020_00259_08329_9693.N1
ATS_NL__0PPLRA20031004_015252_000063342020_00260_08330_9694.N1
ATS_NL__0PPLRA20031004_033327_000063362020_00261_08331_9695.N1
ATS_NL__0PPLRA20031004_051403_000063352020_00262_08332_9696.N1
ATS_NL__0PPLRA20031004_065440_000063342020_00263_08333_9697.N1
ATS_NL__0PPLRA20031004_083515_000063352020_00264_08334_9698.N1
ATS_NL__0PPLRA20031004_101551_000063352020_00265_08335_9699.N1
ATS_NL__0PPLRA20031004_115627_000063352020_00266_08336_9700.N1
ATS_NL__0PPLRA20031004_133703_000063352020_00267_08337_9701.N1
ATS_NL__0PPLRA20031004_151739_000063362020_00268_08338_9702.N1
ATS_NL__0PPLRA20031004_165815_000063362020_00269_08339_9703.N1
ATS_NL__0PPLRA20031004_183851_000063352020_00270_08340_9704.N1

Product name (Duplicate L0)
ATS_NL__0PPLRA20031004_201927_000063352020_00271_08341_9705.N1
ATS_NL__0PPLRA20031004_220003_000063352020_00272_08342_9706.N1
ATS_NL__0PPLRA20031004_234039_000063352020_00273_08343_9707.N1
ATS_NL__0PPLRA20031009_005523_000063352020_00331_08401_9780.N1
ATS_NL__0PPLRA20031023_234329_000063352021_00044_08615_0067.N1
ATS_NL__0PPLRA20031029_002634_000063352021_00116_08687_0171.N1
ATS_NL__0PPLRA20031124_233745_000063352022_00001_09073_0728.N1
ATS_NL__0PPLRA20031130_002053_000063352022_00073_09145_1051.N1
ATS_NL__0PPLRA20040120_234620_000063352023_00316_09889_1575.N1
ATS_NL__0PPLRA20040126_002927_000063352023_00388_09961_1648.N1
ATS_NL__0PPLRA20040131_230021_000063352023_00473_10046_1734.N1
ATS_NL__0PPLRA20040203_062007_000063352024_00005_10079_1768.N1
ATS_NL__0PPLRA20040218_000628_000063342024_00216_10290_2045.N1
ATS_NL__0PPLRA20040227_235205_000063352024_00359_10433_2189.N1
ATS_NL__0PPLRA20040321_200757_000063352025_00185_10760_2579.N1
ATS_NL__0PPLRA20040321_232909_000063352025_00187_10762_2581.N1
ATS_NL__0PPLRA20040322_111320_000063352025_00194_10769_2589.N1
ATS_NL__0PPLRA20040322_125356_000063352025_00195_10770_2590.N1
ATS_NL__0PPLRA20040322_143432_000063352025_00196_10771_2591.N1
ATS_NL__0PPLRA20040322_161508_000063362025_00197_10772_2592.N1
ATS_NL__0PPLRA20040322_175544_000063352025_00198_10773_2593.N1
ATS_NL__0PPLRA20040322_193620_000063352025_00199_10774_2594.N1
ATS_NL__0PPLRA20040322_211656_000063352025_00200_10775_2595.N1
ATS_NL__0PPLRA20040322_225732_000063352025_00201_10776_2596.N1
ATS_NL__0PPLRA20040323_090107_000063352025_00207_10782_2603.N1
ATS_NL__0PPLRA20040323_104143_000063352025_00208_10783_2604.N1
ATS_NL__0PPLRA20040323_122219_000063352025_00209_10784_2605.N1
ATS_NL__0PPLRA20040323_140255_000063352025_00210_10785_2606.N1
ATS_NL__0PPLRA20040323_154331_000063362025_00211_10786_2607.N1
ATS_NL__0PPLRA20040323_190443_000063352025_00213_10788_2609.N1
ATS_NL__0PPLRA20040323_204519_000063352025_00214_10789_2610.N1
ATS_NL__0PPLRA20040324_082930_000063352025_00221_10796_2617.N1
ATS_NL__0PPLRA20040324_101006_000063352025_00222_10797_2618.N1
ATS_NL__0PPLRA20040324_115042_000063352025_00223_10798_2619.N1
ATS_NL__0PPLRA20040324_133118_000063352025_00224_10799_2620.N1
ATS_NL__0PPLRA20040324_151154_000063362025_00225_10800_2621.N1
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ATS_NL__0PPLRA20060123_073150_000063352044_00292_20386_4098.N1
ATS_NL__0PPLRA20060123_091226_000063352044_00293_20387_4099.N1

Product name (Duplicate L0)
ATS_NL__0PPLRA20060123_105302_000063352044_00294_20388_4100.N1
ATS_NL__0PPLRA20060123_123338_000063342044_00295_20389_4101.N1
ATS_NL__0PPLRA20060123_141413_000063362044_00296_20390_4102.N1
ATS_NL__0PPLRA20060123_155450_000063352044_00297_20391_4103.N1
ATS_NL__0PPLRA20060123_173526_000063352044_00298_20392_4104.N1
ATS_NL__0PPLRA20060123_191601_000063352044_00299_20393_4105.N1
ATS_NL__0PPLRA20060123_205637_000063352044_00300_20394_4106.N1
ATS_NL__0PPLRA20060123_223713_000063352044_00301_20395_4107.N1
ATS_NL__0PPLRA20060124_001749_000063352044_00302_20396_4108.N1
ATS_NL__0PPLRA20060202_003505_000063352044_00431_20525_4252.N1
ATS_NL__0PPLRA20060212_002043_000063352045_00073_20668_4396.N1
ATS_NL__0PPLRA20060215_002628_000063352045_00116_20711_4440.N1
ATS_NL__0PPLRA20060215_052816_000063352045_00119_20714_4443.N1
ATS_NL__0PPLRA20060215_070852_000063352045_00120_20715_4444.N1
ATS_NL__0PPLRA20060324_010347_000063352046_00145_21241_4991.N1
ATS_NL__0PPLRA20060329_000617_000063352046_00216_21312_5063.N1
ATS_NL__0PPLRA20060329_014653_000063352046_00217_21313_5064.N1
ATS_NL__0PPLRA20060411_232607_000063352046_00416_21512_5492.N1
ATS_NL__0PPLRA20060412_010643_000063352046_00417_21513_5493.N1
ATS_NL__0PPLRA20060412_024719_000063362046_00418_21514_5494.N1
ATS_NL__0PPLRA20060412_042755_000063362046_00419_21515_5495.N1
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ATS_NL__0PPLRA20060412_092943_000063352046_00422_21518_5498.N1
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ATS_NL__0PPLRA20060412_143130_000063362046_00425_21521_5501.N1
ATS_NL__0PPLRA20060412_161206_000063362046_00426_21522_5502.N1
ATS_NL__0PPLRA20060412_175242_000063352046_00427_21523_5503.N1
ATS_NL__0PPLRA20060412_193319_000063342046_00428_21524_5491.N1
ATS_NL__0PPLRA20060412_211354_000063352046_00429_21525_5490.N1
ATS_NL__0PPLRA20060426_235455_000063352047_00130_21727_5590.N1
ATS_NL__0PPLRA20060427_013531_000063352047_00131_21728_5591.N1
ATS_NL__0PPLRA20060531_002632_000063352048_00116_22214_6084.N1
ATS_NL__0PPLRA20060626_233746_000063352049_00001_22600_6499.N1
ATS_NL__0PPLRA20060630_011419_000008872049_00045_22644_6547.N1
ATS_NL__0PPLRA20060705_002638_000063352049_00116_22715_6620.N1
ATS_NL__0PPLRA20060710_010946_000063352049_00188_22787_6693.N1
ATS_NL__0PPLRA20060714_004354_000063352049_00245_22844_6751.N1

Product name (Duplicate L0)
ATS_NL__0PPLRA20060724_002932_000063342049_00388_22987_6895.N1
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ATS_NL__0PPLRA20060813_000046_000063342050_00173_23273_7416.N1
ATS_NL__0PPLRA20060822_001759_000063352050_00302_23402_7549.N1
ATS_NL__0PPLRA20060916_003217_000063352051_00159_23760_7913.N1
ATS_NL__0PPLRA20061009_000921_000063352051_00488_24089_8292.N1
ATS_NL__0PPLRA20061012_220254_000063352052_00043_24145_8349.N1
ATS_NL__0PPLRA20061112_004058_000063352052_00474_24576_8798.N1
ATS_NL__0PPLRA20061122_002636_000063352053_00116_24719_8942.N1
ATS_NL__0PPLRA20070115_235746_000063352054_00402_25506_0022.N1
ATS_NL__0PPLRA20070213_001754_000063352055_00302_25907_0651.N1
ATS_NL__0PPLRA20070301_001502_000063352056_00030_26136_0881.N1
ATS_NL__0PPLRA20070715_004057_000063352059_00474_28083_3045.N1
ATS_NL__0PPLRA20070829_002633_000063352061_00116_28727_3737.N1
ATS_NL__0PPLRA20070908_001210_000063352061_00259_28870_3881.N1
ATS_NL__0PPLRA20070923_004052_000063342061_00474_29085_4192.N1
ATS_NL__0PPLRA20071022_235745_000063352062_00402_29514_4622.N1
ATS_NL__0PPLRA20071027_011228_000063352062_00460_29572_4682.N1
ATS_NL__0PPLRA20071027_043340_000063352062_00462_29574_4684.N1
ATS_NL__0PPLRA20071027_061416_000063352062_00463_29575_4685.N1
ATS_NL__0PPLRA20071027_075452_000063352062_00464_29576_4686.N1
ATS_NL__0PPLRA20071027_093528_000063352062_00465_29577_4687.N1
ATS_NL__0PPLRA20071027_111604_000063352062_00466_29578_4688.N1
ATS_NL__0PPLRA20071027_125640_000063352062_00467_29579_4689.N1
ATS_NL__0PPLRA20071027_143716_000063362062_00468_29580_4690.N1
ATS_NL__0PPLRA20071027_161752_000063362062_00469_29581_4691.N1
ATS_NL__0PPLRA20071027_175828_000063352062_00470_29582_4692.N1
ATS_NL__0PPLRA20071027_193904_000063352062_00471_29583_4693.N1
ATS_NL__0PPLRA20071027_211940_000063342062_00472_29584_4694.N1
ATS_NL__0PPLRA20071027_230016_000063342062_00473_29585_4695.N1
ATS_NL__0PPLRA20071028_004051_000063352062_00474_29586_4696.N1
ATS_NL__0PPLRA20071031_004636_000063352063_00016_29629_4739.N1
ATS_NL__0PPLRA20071110_003213_000063352063_00159_29772_4883.N1
ATS_NL__0PPLRA20071129_003503_000063352063_00431_30044_5161.N1
ATS_NL__0PPLRA20071208_105553_000063352064_00065_30179_5312.N1
ATS_NL__0PPLRA20071209_002041_000063352064_00073_30187_5320.N1
ATS_NL__0PPLRA20071213_063713_000004062064_00134_30248_5382.N1
ATS_NL__0PPLRA20080109_004635_000063352065_00016_30631_5816.N1
ATS_NL__0PPLRA20080113_234906_000063352065_00087_30702_5888.N1

Product name (Duplicate L0)
ATS_NL__0PPLRA20080120_000036_000063352065_00173_30788_5975.N1
ATS_NL__0PPLRA20080130_012649_000063352065_00317_30932_6121.N1
ATS_NL__0PPLRA20080201_134822_000063352065_00353_30968_6158.N1
ATS_NL__0PPLRA20080417_003504_000063352067_00431_32048_7312.N1
ATS_NL__0PPLRA20080421_215659_000004802068_00501_32118_7383.N1
ATS_NL__0PPLRA20080424_220244_000063352068_00043_32161_7477.N1
ATS_NL__0PPLRA20080426_224006_000063352068_00072_32190_7489.N1
ATS_NL__0PPLRA20080427_002042_000063352068_00073_32191_7488.N1
ATS_NL__0PPLRA20080507_000621_000063342068_00216_32334_7665.N1
ATS_NL__0PPLRA20080507_032732_000063362068_00218_32336_7668.N1
ATS_NL__0PPLRA20080507_050808_000063352068_00219_32337_7669.N1
ATS_NL__0PPLRA20080507_064844_000063352068_00220_32338_7670.N1
ATS_NL__0PPLRA20080507_082920_000063352068_00221_32339_7671.N1
ATS_NL__0PPLRA20080507_100956_000063352068_00222_32340_7672.N1
ATS_NL__0PPLRA20080507_115032_000063352068_00223_32341_7673.N1
ATS_NL__0PPLRA20080507_151144_000063362068_00225_32343_7675.N1
ATS_NL__0PPLRA20080507_165220_000063362068_00226_32344_7676.N1
ATS_NL__0PPLRA20080508_043631_000063362068_00233_32351_7683.N1
ATS_NL__0PPLRA20080516_002336_000063352068_00345_32463_7795.N1
ATS_NL__0PPLRA20080519_235744_000063352068_00402_32520_7853.N1
ATS_NL__0PPLRA20080525_004051_000063352068_00474_32592_7926.N1
ATS_NL__0PPLRA20080630_000914_000063352069_00488_33107_8566.N1
ATS_NL__0PPLRA20080813_002628_000063352071_00116_33737_9205.N1
ATS_NL__0PPLRA20080823_001205_000063342071_00259_33880_9362.N1
ATS_NL__0PPLRA20080924_000619_000063352072_00216_34338_9827.N1
ATS_NL__0PPLRA20080930_001749_000063352072_00302_34424_0015.N1
ATS_NL__0PPLRA20081007_031854_000063362072_00404_34526_0118.N1
ATS_NL__0PPLRA20081110_235740_000063352073_00402_35025_0656.N1
ATS_NL__0PPLRA20081120_001454_000063352074_00030_35154_0786.N1
ATS_NL__0PPLRA20090110_001203_000063342075_00259_35884_1526.N1
ATS_NL__0PPLRA20090119_235739_000063352075_00402_36027_1670.N1
ATS_NL__0PPLRA20090211_000618_000063352076_00216_36342_1990.N1
ATS_NL__0PPLRA20090312_131936_000063352077_00138_36765_2417.N1
ATS_NL__0PPLRA20090312_150012_000063362077_00139_36766_2418.N1
ATS_NL__0PPLRA20090312_164048_000063352077_00140_36767_2419.N1
ATS_NL__0PPLRA20090312_182124_000063352077_00141_36768_2420.N1
ATS_NL__0PPLRA20090312_200200_000063352077_00142_36769_2421.N1
ATS_NL__0PPLRA20090312_214236_000063352077_00143_36770_2422.N1
ATS_NL__0PPLRA20090312_232312_000063352077_00144_36771_2423.N1

Product name (Duplicate L0)
ATS_NL__0PPLRA20090317_204507_000063352077_00214_36841_2500.N1
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ATS_NL__0PPLRA20090318_000618_000063352077_00216_36843_2502.N1
ATS_NL__0PPLRA20090327_002332_000063352077_00345_36972_2634.N1
ATS_NL__0PPLRA20090406_000908_000063352077_00488_37115_2778.N1
ATS_NL__0PPLRA20090415_235447_000063342078_00130_37258_2926.N1
ATS_NL__0PPLRA20090514_001456_000063352079_00030_37659_3382.N1
ATS_NL__0PPLRA20090524_232858_000063352079_00187_37816_3540.N1
ATS_NL__0PPLRA20090621_002043_000063352080_00073_38203_3937.N1
ATS_NL__0PPLRA20090625_232314_000063352080_00144_38274_4009.N1
ATS_NL__0PPLRA20090701_000620_000063352080_00216_38346_4114.N1
ATS_NL__0PPLRA20090710_002335_000063342080_00345_38475_4500.N1
ATS_NL__0PPLRA20090724_231143_000063352081_00058_38689_4716.N1
ATS_NL__0PPLRA20091014_000614_000063352083_00216_39849_5942.N1
ATS_NL__0PPLRA20091115_000029_000063352084_00173_40307_6419.N1
ATS_NL__0PPLRA20091126_073728_000063352084_00335_40469_6585.N1
ATS_NL__0PPLRA20091126_091804_000063352084_00336_40470_6586.N1
ATS_NL__0PPLRA20091126_105840_000063352084_00337_40471_6587.N1
ATS_NL__0PPLRA20091126_123916_000063352084_00338_40472_6588.N1
ATS_NL__0PPLRA20091126_160028_000063352084_00340_40474_6590.N1
ATS_NL__0PPLRA20091126_174104_000063342084_00341_40475_6591.N1
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ATS_NL__0PPLRA20091126_210215_000063352084_00343_40477_6593.N1
ATS_NL__0PPLRA20091126_224251_000063352084_00344_40478_6594.N1
ATS_NL__0PPLRA20091127_002327_000063352084_00345_40479_6595.N1
ATS_NL__0PPLRA20091127_020403_000063352084_00346_40480_6596.N1
ATS_NL__0PPLRA20091127_034439_000063362084_00347_40481_6597.N1
ATS_NL__0PPLRA20091127_052515_000063352084_00348_40482_6598.N1
ATS_NL__0PPLRA20091127_070551_000063352084_00349_40483_6599.N1
ATS_NL__0PPLRA20091127_084627_000063352084_00350_40484_6600.N1
ATS_NL__0PPLRA20091127_102703_000063352084_00351_40485_6601.N1
ATS_NL__0PPLRA20091127_120739_000063342084_00352_40486_6602.N1
ATS_NL__0PPLRA20091127_134814_000063352084_00353_40487_6603.N1
ATS_NL__0PPLRA20091127_152850_000063362084_00354_40488_6604.N1
ATS_NL__0PPLRA20091127_170926_000063352084_00355_40489_6605.N1
ATS_NL__0PPLRA20091127_185002_000063352084_00356_40490_6606.N1
ATS_NL__0PPLRA20091127_203038_000063352084_00357_40491_6607.N1
ATS_NL__0PPLRA20091127_221114_000063352084_00358_40492_6608.N1
ATS_NL__0PPLRA20091127_235150_000063352084_00359_40493_6609.N1

Product name (Duplicate L0)
ATS_NL__0PPLRA20091127_235150_000063352084_00359_40493_6734.N1
ATS_NL__0PPLRA20100117_002036_000063352086_00073_41209_7440.N1
ATS_NL__0PPLRA20100203_231429_000063342086_00330_41466_7698.N1
ATS_NL__0PPLRA20100208_002912_000063352086_00388_41524_7757.N1
ATS_NL__0PPLRA20100212_000320_000063342086_00445_41581_7815.N1
ATS_NL__0PPLRA20100217_004626_000063342087_00016_41653_7888.N1
ATS_NL__0PPLRA20100221_220821_000063352087_00086_41723_7959.N1
ATS_NL__0PPLRA20100221_234857_000063352087_00087_41724_7960.N1
ATS_NL__0PPLRA20100301_225714_000063342087_00201_41838_8078.N1
ATS_NL__0PPLRA20100306_001158_000063352087_00259_41896_8137.N1
ATS_NL__0PPLRA20100315_002913_000063352087_00388_42025_8267.N1
ATS_NL__0PPLRA20100322_233729_000063352088_00001_42139_8382.N1
ATS_NL__0PPLRA20100328_234859_000063342088_00087_42225_8443.N1
ATS_NL__0PPLRA20100416_235149_000063352088_00359_42497_8743.N1
ATS_NL__0PPLRA20100420_232556_000063352088_00416_42554_8801.N1
ATS_NL__0PPLRA20100426_000903_000063352088_00488_42626_8902.N1
ATS_NL__0PPLRA20100518_120152_000063352089_00309_42948_9227.N1
ATS_NL__0PPLRA20100518_134228_000063352089_00310_42949_9228.N1
ATS_NL__0PPLRA20100518_152304_000063362089_00311_42950_9229.N1
ATS_NL__0PPLRA20100518_170340_000063352089_00312_42951_9230.N1
ATS_NL__0PPLRA20100518_184416_000063352089_00313_42952_9231.N1
ATS_NL__0PPLRA20100518_202452_000063352089_00314_42953_9232.N1
ATS_NL__0PPLRA20100518_220528_000063352089_00315_42954_9233.N1
ATS_NL__0PPLRA20100518_234604_000063352089_00316_42955_9234.N1
ATS_NL__0PPLRA20100528_000318_000063352089_00445_43084_9433.N1
ATS_NL__0PPLRA20100602_004625_000063352090_00016_43156_9506.N1
ATS_NL__0PPLRA20100924_024414_000063352093_00146_44789_4999.N1
ATS_NL__0PPLRA20110425_183841_000012633101_00429_47857_7656.N1
ATS_NL__0PPLRA20110425_203802_000042553101_00431_47859_7680.N1
ATS_NL__0PPLRA20110509_050341_000020643102_00191_48050_4264.N1
ATS_NL__0PPLRA20110509_050341_000020643102_00191_48050_4963.N1
ATS_NL__0PPLRA20110509_071121_000046673102_00193_48052_4294.N1
ATS_NL__0PPLRA20110509_071121_000046673102_00193_48052_4964.N1
ATS_NL__0PPLRA20110509_082409_000063133102_00193_48052_4315.N1
ATS_NL__0PPLRA20110509_100423_000063133102_00194_48053_4352.N1
ATS_NL__0PPLRA20110509_114437_000063133102_00195_48054_4377.N1
ATS_NL__0PPLRA20110509_132451_000063143102_00196_48055_4433.N1
ATS_NL__0PPLRA20110509_150505_000063143102_00197_48056_4469.N1
ATS_NL__0PPLRA20110522_184909_000063133102_00386_48245_0931.N1

Product name (Duplicate L0)
ATS_NL__0PPLRA20110529_111131_000063133103_00051_48341_6449.N1
ATS_NL__0PPLRA20110529_125145_000063133103_00052_48342_6456.N1
ATS_NL__0PPLRA20110606_225957_000063133103_00173_48463_9371.N1
ATS_NL__0PPLRA20110721_084838_000063133104_00380_49101_6973.N1
ATS_NL__0PPLRA20110723_055456_000063143104_00407_49128_4014.N1
ATS_NL__0PPLRA20110724_051812_000063133104_00421_49142_7176.N1
ATS_NL__0PPLRA20110725_130237_000063133105_00009_49161_7263.N1
ATS_NL__0PPLRA20110726_072511_000063133105_00020_49172_7300.N1
ATS_NL__0PPLRA20110727_050813_000063133105_00033_49185_7313.N1
ATS_NL__0PPLRA20110728_075156_000063133105_00049_49201_7330.N1
ATS_NL__0PPLRA20110729_021430_000063143105_00060_49212_7362.N1
ATS_NL__0PPLRA20110729_021430_000063143105_00060_49212_7391.N1
ATS_NL__0PPLRA20110905_040153_000063143106_00176_49759_8448.N1
ATS_NL__0PPLRA20110905_054207_000063133106_00177_49760_8457.N1
ATS_NL__0PPLRA20110905_072221_000063133106_00178_49761_8467.N1
ATS_NL__0PPLRA20110920_081237_000063133106_00394_49977_8052.N1
ATS_NL__0PPLRA20110924_154703_000063133107_00025_50039_6676.N1
ATS_NL__0PPLRA20110924_154703_000063133107_00025_50039_7002.N1
ATS_NL__0PPLRA20110924_172717_000063133107_00026_50040_6703.N1
ATS_NL__0PPLRA20110925_064908_000063133107_00034_50048_6852.N1
ATS_NL__0PPLRA20111003_165718_000063143107_00155_50169_0570.N1
ATS_NL__0PPLRA20111010_142019_000063143107_00254_50268_2843.N1
ATS_NL__0PPLRA20120107_045615_000063143110_00234_51541_5280.N1
ATS_NL__0PPLRA20120107_063629_000063133110_00235_51542_5301.N1
ATS_NL__0PPLRA20120107_063629_000063133110_00235_51542_6215.N1
ATS_NL__0PPLRA20120107_081643_000063133110_00236_51543_5318.N1
ATS_NL__0PPLRA20120107_100133_000060373110_00238_51545_5362.N1
ATS_NL__0PPLRA20120107_113711_000063123110_00238_51545_5389.N1
ATS_NL__0PPLRA20120118_145420_000063143110_00398_51705_8963.N1
ATS_NL__0PPLRA20120118_163434_000063143110_00399_51706_8985.N1
ATS_NL__0PPLRA20120118_195502_000063133110_00401_51708_9042.N1
ATS_NL__0PPLRA20120319_091702_000063133112_00409_52578_3611.N1

C.2   List of encompassed AATSR L0 products (166 products)

Table 20 lists the encompassed products that IDEAS have identified in the LRAC L0 database. It is recommended that these be set aside from the L0 database.

Table 20. Encompassed L0 products

Product name (Encompassed L0)
ATS_NL__0PPLRA20020615_230019_000002032006_00473_01529_0447.N1
ATS_NL__0PPLRA20020715_002925_000063352007_00388_01945_0966.N1
ATS_NL__0PPLRA20021207_230017_000063342011_00473_04034_4680.N1
ATS_NL__0PPLRA20030223_102652_000001452014_00079_05143_5815.N1
ATS_NL__0PPLRA20040322_010945_000063342025_00188_10763_2583.N1
ATS_NL__0PPLRA20040322_093244_000063352025_00193_10768_2588.N1
ATS_NL__0PPLRA20040323_003808_000063342025_00202_10777_2597.N1
ATS_NL__0PPLRA20040323_021843_000063352025_00203_10778_2599.N1
ATS_NL__0PPLRA20040323_072031_000063352025_00206_10781_2602.N1
ATS_NL__0PPLRA20040323_172407_000063352025_00212_10787_2608.N1
ATS_NL__0PPLRA20040323_222555_000063342025_00215_10790_2611.N1
ATS_NL__0PPLRA20040324_000631_000063342025_00216_10791_2612.N1
ATS_NL__0PPLRA20040324_014706_000063352025_00217_10792_2613.N1
ATS_NL__0PPLRA20040324_032742_000063362025_00218_10793_2614.N1
ATS_NL__0PPLRA20040324_050818_000063352025_00219_10794_2615.N1
ATS_NL__0PPLRA20040324_064854_000063352025_00220_10795_2616.N1
ATS_NL__0PPLRA20040324_215418_000063342025_00229_10804_2625.N1
ATS_NL__0PPLRA20040325_011529_000063352025_00231_10806_2627.N1
ATS_NL__0PPLRA20040325_025605_000063352025_00232_10807_2628.N1
ATS_NL__0PPLRA20040325_043641_000063362025_00233_10808_2629.N1
ATS_NL__0PPLRA20040325_061717_000063352025_00234_10809_2630.N1
ATS_NL__0PPLRA20040325_144017_000063342025_00239_10814_2635.N1
ATS_NL__0PPLRA20040325_180129_000063342025_00241_10816_2637.N1
ATS_NL__0PPLRA20040325_194205_000063342025_00242_10817_2638.N1
ATS_NL__0PPLRA20040520_234332_000063342027_00044_11621_3527.N1
ATS_NL__0PPLRA20040521_030443_000063362027_00046_11623_3529.N1
ATS_NL__0PPLRA20040521_044519_000063362027_00047_11624_3530.N1
ATS_NL__0PPLRA20040521_094707_000063352027_00050_11627_3533.N1
ATS_NL__0PPLRA20040524_113329_000063342027_00094_11671_3577.N1
ATS_NL__0PPLRA20040524_131405_000063342027_00095_11672_3578.N1
ATS_NL__0PPLRA20040524_163517_000063352027_00097_11674_3580.N1
ATS_NL__0PPLRA20050202_233945_000000062034_00230_15314_7954.N1
ATS_NL__0PPLRA20050317_005519_000002872035_00331_15916_8614.N1
ATS_NL__0PPLRA20060110_005803_000001152044_00102_20196_3790.N1

Product name (Encompassed L0)
ATS_NL__0PPLRA20060804_012408_000001432050_00045_23145_7063.N1
ATS_NL__0PPLRA20071203_215902_000000562063_00501_30114_5232.N1
ATS_NL__0PPLRA20091008_031556_000000092083_00132_39765_5858.N1
ATS_NL__0PPLRA20110223_091257_000019723099_00409_46975_1498.N1
ATS_NL__0PPLRA20110223_130059_000046583099_00412_46978_1570.N1
ATS_NL__0PPLRA20110526_080102_000018463103_00006_48296_3246.N1
ATS_NL__0PPLRA20110526_101251_000044183103_00008_48298_3367.N1
ATS_NL__0PPLRA20110721_103122_000060133104_00382_49103_7574.N1
ATS_NL__0PPLRA20110721_121136_000060133104_00383_49104_7575.N1
ATS_NL__0PPLRA20110721_135150_000060143104_00384_49105_7576.N1
ATS_NL__0PPLRA20110721_153204_000060143104_00385_49106_7577.N1
ATS_NL__0PPLRA20110721_171218_000060143104_00386_49107_7578.N1
ATS_NL__0PPLRA20110721_185232_000060133104_00387_49108_7579.N1
ATS_NL__0PPLRA20110721_203246_000060133104_00388_49109_7580.N1
ATS_NL__0PPLRA20110721_221300_000060133104_00389_49110_7581.N1
ATS_NL__0PPLRA20110721_235314_000060133104_00390_49111_7582.N1
ATS_NL__0PPLRA20110722_013328_000060133104_00391_49112_7583.N1
ATS_NL__0PPLRA20110722_031342_000060143104_00392_49113_7584.N1
ATS_NL__0PPLRA20110722_045356_000060143104_00393_49114_7585.N1
ATS_NL__0PPLRA20110722_063410_000060133104_00394_49115_7586.N1
ATS_NL__0PPLRA20110722_081424_000060133104_00395_49116_7587.N1
ATS_NL__0PPLRA20110722_095438_000060133104_00396_49117_7658.N1
ATS_NL__0PPLRA20110722_113452_000060133104_00397_49118_7715.N1
ATS_NL__0PPLRA20110722_131506_000060133104_00398_49119_7757.N1
ATS_NL__0PPLRA20110722_145520_000060143104_00399_49120_7806.N1
ATS_NL__0PPLRA20110722_163534_000060143104_00400_49121_7903.N1
ATS_NL__0PPLRA20110722_181548_000060143104_00401_49122_7930.N1
ATS_NL__0PPLRA20110722_195602_000060133104_00402_49123_7944.N1
ATS_NL__0PPLRA20110722_213616_000060133104_00403_49124_7973.N1
ATS_NL__0PPLRA20110722_231630_000060133104_00404_49125_8009.N1
ATS_NL__0PPLRA20110723_005644_000060133104_00405_49126_8029.N1
ATS_NL__0PPLRA20110723_023658_000060143104_00406_49127_8041.N1
ATS_NL__0PPLRA20110723_041712_000060143104_00407_49128_8046.N1
ATS_NL__0PPLRA20110723_055726_000060143104_00408_49129_8056.N1
ATS_NL__0PPLRA20110723_073740_000060133104_00409_49130_8080.N1
ATS_NL__0PPLRA20110723_091754_000060133104_00410_49131_8148.N1
ATS_NL__0PPLRA20110723_105808_000060133104_00411_49132_8176.N1
ATS_NL__0PPLRA20110723_123822_000060123104_00412_49133_8219.N1
ATS_NL__0PPLRA20110723_141836_000060133104_00413_49134_8278.N1

Product name (Encompassed L0)
ATS_NL__0PPLRA20110723_155850_000060143104_00414_49135_8326.N1
ATS_NL__0PPLRA20110723_173904_000060143104_00415_49136_8435.N1
ATS_NL__0PPLRA20110723_191918_000060133104_00416_49137_8469.N1
ATS_NL__0PPLRA20110723_205932_000060133104_00417_49138_8511.N1
ATS_NL__0PPLRA20110723_223946_000060123104_00418_49139_8531.N1
ATS_NL__0PPLRA20110724_002000_000060123104_00419_49140_8544.N1
ATS_NL__0PPLRA20110724_020013_000060133104_00420_49141_8560.N1
ATS_NL__0PPLRA20110724_034028_000060133104_00421_49142_8571.N1
ATS_NL__0PPLRA20110724_052042_000060133104_00422_49143_8577.N1
ATS_NL__0PPLRA20110724_070056_000060123104_00423_49144_8588.N1
ATS_NL__0PPLRA20110724_084110_000060123104_00424_49145_8612.N1
ATS_NL__0PPLRA20110724_102124_000060123104_00425_49146_8721.N1
ATS_NL__0PPLRA20110724_120137_000060133104_00426_49147_8763.N1
ATS_NL__0PPLRA20110724_134151_000060143104_00427_49148_8867.N1
ATS_NL__0PPLRA20110724_152205_000060143104_00428_49149_8887.N1
ATS_NL__0PPLRA20110724_170219_000060143104_00429_49150_8874.N1
ATS_NL__0PPLRA20110724_184233_000060143104_00430_49151_8958.N1
ATS_NL__0PPLRA20110724_202247_000060133104_00431_49152_8989.N1
ATS_NL__0PPLRA20110724_220301_000060133105_00001_49153_9000.N1
ATS_NL__0PPLRA20110724_234315_000060133105_00002_49154_9017.N1
ATS_NL__0PPLRA20110725_012329_000060133105_00003_49155_9027.N1
ATS_NL__0PPLRA20110725_030343_000060143105_00004_49156_9046.N1
ATS_NL__0PPLRA20110725_044357_000060143105_00005_49157_9058.N1
ATS_NL__0PPLRA20110725_062411_000060133105_00006_49158_9069.N1
ATS_NL__0PPLRA20110725_080425_000060133105_00007_49159_9093.N1
ATS_NL__0PPLRA20110725_094439_000060133105_00008_49160_9136.N1
ATS_NL__0PPLRA20110725_112453_000060133105_00009_49161_9201.N1
ATS_NL__0PPLRA20110725_130507_000060133105_00010_49162_9237.N1
ATS_NL__0PPLRA20110725_144521_000060143105_00011_49163_9274.N1
ATS_NL__0PPLRA20110725_162535_000060143105_00012_49164_9318.N1
ATS_NL__0PPLRA20110725_180549_000060133105_00013_49165_9346.N1
ATS_NL__0PPLRA20110725_194603_000060133105_00014_49166_9415.N1
ATS_NL__0PPLRA20110725_212617_000060133105_00015_49167_9434.N1
ATS_NL__0PPLRA20110725_230631_000060133105_00016_49168_9446.N1
ATS_NL__0PPLRA20110726_004645_000060133105_00017_49169_9455.N1
ATS_NL__0PPLRA20110726_022659_000060143105_00018_49170_9468.N1
ATS_NL__0PPLRA20110726_040713_000060143105_00019_49171_9502.N1
ATS_NL__0PPLRA20110726_054727_000060143105_00020_49172_9506.N1
ATS_NL__0PPLRA20110726_072741_000060133105_00021_49173_9517.N1

Product name (Encompassed L0)
ATS_NL__0PPLRA20110726_090755_000060133105_00022_49174_9553.N1
ATS_NL__0PPLRA20110726_104809_000060133105_00023_49175_9582.N1
ATS_NL__0PPLRA20110726_122823_000060133105_00024_49176_9636.N1
ATS_NL__0PPLRA20110726_140837_000060143105_00025_49177_9661.N1
ATS_NL__0PPLRA20110726_154851_000060143105_00026_49178_9768.N1
ATS_NL__0PPLRA20110726_172905_000060143105_00027_49179_9777.N1
ATS_NL__0PPLRA20110726_190919_000060133105_00028_49180_9786.N1
ATS_NL__0PPLRA20110726_204933_000060133105_00029_49181_9837.N1
ATS_NL__0PPLRA20110726_222947_000060133105_00030_49182_9858.N1
ATS_NL__0PPLRA20110727_001001_000060133105_00031_49183_9878.N1
ATS_NL__0PPLRA20110727_015015_000060123105_00032_49184_9898.N1
ATS_NL__0PPLRA20110727_033028_000060143105_00033_49185_0013.N1
ATS_NL__0PPLRA20110727_051043_000060133105_00034_49186_0030.N1
ATS_NL__0PPLRA20110727_065057_000060133105_00035_49187_0042.N1
ATS_NL__0PPLRA20110727_083111_000060123105_00036_49188_0069.N1
ATS_NL__0PPLRA20110727_101125_000060123105_00037_49189_0108.N1
ATS_NL__0PPLRA20110727_115139_000060123105_00038_49190_0188.N1
ATS_NL__0PPLRA20110727_133152_000060133105_00039_49191_0240.N1
ATS_NL__0PPLRA20110727_151206_000060143105_00040_49192_0305.N1
ATS_NL__0PPLRA20110727_165220_000060143105_00041_49193_0378.N1
ATS_NL__0PPLRA20110727_183235_000060133105_00042_49194_0427.N1
ATS_NL__0PPLRA20110727_201248_000060133105_00043_49195_0501.N1
ATS_NL__0PPLRA20110727_215302_000060133105_00044_49196_0520.N1
ATS_NL__0PPLRA20110727_233316_000060133105_00045_49197_0532.N1
ATS_NL__0PPLRA20110728_011330_000060133105_00046_49198_0542.N1
ATS_NL__0PPLRA20110728_025344_000060143105_00047_49199_0554.N1
ATS_NL__0PPLRA20110728_043358_000060143105_00048_49200_0572.N1
ATS_NL__0PPLRA20110728_061412_000060143105_00049_49201_0583.N1
ATS_NL__0PPLRA20110728_075426_000060133105_00050_49202_0608.N1
ATS_NL__0PPLRA20110728_093440_000060133105_00051_49203_0649.N1
ATS_NL__0PPLRA20110728_111454_000060133105_00052_49204_0681.N1
ATS_NL__0PPLRA20110728_125508_000060133105_00053_49205_0763.N1
ATS_NL__0PPLRA20110728_143522_000060143105_00054_49206_0786.N1
ATS_NL__0PPLRA20110728_161536_000060143105_00055_49207_0823.N1
ATS_NL__0PPLRA20110728_175550_000060143105_00056_49208_0862.N1
ATS_NL__0PPLRA20110728_193604_000060133105_00057_49209_0897.N1
ATS_NL__0PPLRA20110728_211618_000060133105_00058_49210_0948.N1
ATS_NL__0PPLRA20110728_225632_000060133105_00059_49211_0965.N1
ATS_NL__0PPLRA20110729_003646_000060133105_00060_49212_0972.N1

Product name (Encompassed L0)
ATS_NL__0PPLRA20110729_021700_000060143105_00061_49213_0985.N1
ATS_NL__0PPLRA20110729_035714_000060143105_00062_49214_0997.N1
ATS_NL__0PPLRA20110729_053728_000060143105_00063_49215_1013.N1
ATS_NL__0PPLRA20110729_071742_000060133105_00064_49216_1033.N1
ATS_NL__0PPLRA20110729_085756_000060133105_00065_49217_1064.N1
ATS_NL__0PPLRA20110729_103810_000060133105_00066_49218_1101.N1
ATS_NL__0PPLRA20110729_121824_000060133105_00067_49219_1137.N1
ATS_NL__0PPLRA20110828_185713_000011653106_00070_49653_5253.N1
ATS_NL__0PPLRA20110828_205516_000052443106_00072_49655_5306.N1
ATS_NL__0PPLRA20111003_165718_000013183107_00155_50169_0181.N1
ATS_NL__0PPLRA20111003_185622_000051833107_00157_50171_0206.N1
ATS_NL__0PPLRA20120107_081643_000017063110_00236_51543_6244.N1
ATS_NL__0PPLRA20120107_102805_000044453110_00238_51545_6245.N1
ATS_NL__0PPLRA20120229_073323_000018963112_00135_52304_4983.N1
ATS_NL__0PPLRA20120229_094538_000043913112_00137_52306_5042.N1

C.3 List of overlapped AATSR L0 products (13 products)

Table 21 lists the overlapped products that IDEAS have identified in the LRAC L0 database. It is recommended that these be set aside from the L0 database.

Table 21. Overlapped L0 products

Product name (Overlapped L0)
ATS_NL__0PPLRA20040322_025020_000063352025_00189_10764_2584.N1
ATS_NL__0PPLRA20040322_043056_000063362025_00190_10765_2585.N1
ATS_NL__0PPLRA20040322_061132_000063352025_00191_10766_2586.N1
ATS_NL__0PPLRA20040322_075208_000063352025_00192_10767_2587.N1
ATS_NL__0PPLRA20040323_035919_000063362025_00204_10779_2600.N1
ATS_NL__0PPLRA20040323_053955_000063352025_00205_10780_2601.N1
ATS_NL__0PPLRA20040324_233453_000063352025_00230_10805_2626.N1
ATS_NL__0PPLRA20040325_212240_000063352025_00243_10818_2639.N1
ATS_NL__0PPLRA20040521_012407_000063352027_00045_11622_3528.N1
ATS_NL__0PPLRA20040521_062555_000063352027_00048_11625_3531.N1
ATS_NL__0PPLRA20040521_080631_000063352027_00049_11626_3532.N1
ATS_NL__0PPLRA20040524_145440_000063362027_00096_11673_3579.N1
ATS_NL__0PPLRA20040524_181552_000063352027_00098_11675_3581.N1

C.4 List of zero-length AATSR L0 products (4 products)

Table 22 lists the zero-length products that IDEAS have identified in the LRAC L0 database. It is recommended that these be set aside from the L0 database.

Table 22. Zero-length L0 products

Product name (Zero-length L0)
ATS_NL__0PPLRA20061215_171619_000000002053_00456_25059_9346.N1
ATS_NL__0PPLRA20091008_135315_000000002083_00139_39772_5864.N1
ATS_NL__0PPLRA20110406_092930_000000003101_00151_47579_9492.N1
ATS_NL__0PPLRA20120126_074600_000000003111_00078_51816_1725.N1

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